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ABSTRACT

While the chapters of this book present a variety of perspectives, they share the common goal of redirecting and revitalizing research on written composition. The authors review research on written discourse and the composing process and raise questions regarding information and skills that teachers and researchers need to consider. The chapters discuss implications for research in composing; the composing process and the functions of writing; needed research on invention (when rhetorical theory is the basis of composing); implications of cognitive-developmental psychology for research on composing; the role of the hand, eye, and brain in the writing process; the writing of young children; the process of discovery in internal revision; research strategies for the study of revision in writing poetry; helping young children start to write; and procedures for identifying invention in writing. (MAI)

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Research on Composing

Points of Departure

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All the chapters in this book, except the first, were originally prepared for the Buffalo Conference on Researching Composing, held at the State University of New York at Buffalo on two weekends in the fall of 1975. The conference was sponsored by the English Education Research Colloquium of the Department of Instruction, Faculty of Educational Studies. Several times a year the colloquium provides Buffalo-area English education specialists an opportunity to hear reports from researchers around this country and Canada. The Conference on Researching Composing was an outgrowth of these meetings of the colloquium. Funding for the conference came primarily from the Research Foundation of the National Council of Teachers of English, with additional grants from the University of Buffalo Foundation and the dean of the Faculty of Educational Studies. It is accurate to say that the conference would never have been held without the generosity of the NCTE Research Foundation. Indirect support for the conference came from our own Department of Instruction, which provided no small amount of clerical, duplicating, and mailing support.

Planning for the conference began in the summer of 1974 when Charles Cooper sent a tentative list of topics and speakers to a number of English education specialists around the country. Several of them responded with helpful suggestions. From early in the fall of 1974, Lee Odell was involved in planning, contacting possible speakers, and inviting the final group of speakers. Following the conference, the two editors read the papers and suggested revisions—sometimes extensive—to the authors. Without exception, they were conscientious in revising, extending, and elaborating their papers on the basis of those suggestions and as a result of the interactions on the two weekends of the conference.

Special appreciation is due William Ellet of the NCTE Publications Department not only for his diligence but for the considerable editorial task of translating the varied styles of academic papers into a coherent collection of essays, largely by working closely with individual contributors.

Introduction

What we have needed for decades and what we must have soon is a period of vigorous research on written discourse and the composing process. For too long a time, many researchers assumed that the most important kind of inquiry was pedagogical research, that the most significant kind of question was: What materials and procedures will improve students' work in written composition? Underlying this question was a further assumption—that we did, in fact, have an adequate understanding of the term *composition*, that our primary job was determining the effectiveness of specific instructional materials and procedures, rather than finding out exactly what information and skills teachers and researchers ought to be concerned with.

The fallacy of such an assumption becomes apparent almost any time we test the precepts that have informed most of the teaching of composition in this century. When Richard Meade and W. Geiger Ellis (1970) examined a number of published writings, they discovered that some of the methods of paragraph development expounded in popular composition texts simply were not to be found in actual pieces of writing—at least not in the large number of published writings they examined. In a more recent study Richard Braddock (1974) discovered that certain conventional assumptions about the use of topic sentences were not borne out by an analysis of published expository writing. In *The Composing Processes of Twelfth Graders*, Emig examined the actual composing processes of professional writers and skillful student writers; she found that, conventional advice notwithstanding, it is not always necessary to write a complete outline before beginning a draft. Although most composition texts are concerned chiefly with matters of organization and style, the testimony of successful writers—see, for example, Peter Elbow's *Writing without Teachers*—indicates that the basic problem in writing is discovering what one wishes to say, not simply deciding how best to present ideas that already exist, fully formulated, in one's mind. Other writers and writing teachers—among them Donald Murray, a Pulitzer Prize winner—argue persuasively that rewriting or reformulation of early drafts enables writers to discover and shape their meanings, an

argument quite at variance with the advice in some current school and college composition texts which imply that writing is simply a matter of "filling in" a prepared outline and that rewriting involves only editing away usage errors, clumsy syntax, and other infelicities.

Without suggesting that the findings of Meade and Ellis and others are conclusive, we do think it is clear that these studies effectively demonstrate the limitations of our present understanding and, consequently, provide ample justification for raising the following new kinds of questions about written discourse and the composing process:

> What do we mean by competence in writing? How is that competence defined by the actual work of competent writers (rather than by the pronouncements of composition handbooks)? What are the features (syntactic, lexical, conceptual) of successful pieces of discourse?
>
> How can we best categorize diverse pieces of written discourse? What basis is there for thinking that narration, description, exposition, and argumentation are valid, useful categories? Can we devise more useful and more valid categories? If so, can we determine whether these new categories or discourse types place different demands on writers or their audiences?
>
> What are the practices that allow skillful student and professional writers to evolve successful pieces of written discourse? Would analysis of these practices allow us to identify distinct stages in this evolution? If so, does each stage entail unique problems, special abilities, or special cognitive/perceptual/sensory-motor activities? How can we study what James Britton refers to in this volume as "shaping at the point of utterance," a process of selecting and refining that occurs while writers are actually putting words on paper?
>
> What can we learn from observing successful writing teachers (such as John Schultz, Phillip Lopate, Kenneth Koch, Kenneth Macrorie, Elliot Wigginton, and Herbert Kohl)? How do they proceed? What assumptions are implicit in their procedures and responses? How can we test those assumptions? What can we learn from these teachers' observations about their own students?
>
> How can we draw upon other disciplines such as developmental psychology to help us refine and pursue the questions we are beginning to ask?

What new procedures seem especially suited to our new questions? Are there methodologies that seem likely to be particularly helpful as we pursue new lines of inquiry?

Writers of the chapters in this book raise all of these questions—and more—and suggest ways researchers might go about answering them. Although they present a variety of perspectives, they share with each other and the editors of this book one audacious aim—that of redirecting and revitalizing research in written composition.

In claiming such a goal, we realize that we are inviting comparison with an earlier book, *Research in Written Composition* (1963), that has become a standard reference in English education. After surveying much of the then existing research in composition, the authors, Richard Braddock, Richard Lloyd-Jones, and Lowell Schoer, came to the rather dismal conclusion that "today's research in composition, taken as a whole, may be compared to chemical research as it emerged from the period of alchemy: some terms are being defined usefully, a number of procedures are being refined, but the field as a whole is laced with dreams, prejudices, and makeshift operations" (p. 5). In an effort to remedy this situation, Braddock and his coauthors outlined basic problems in conducting research in composition and showed researchers how to refine the "structure and technique" of their studies.

The present volume differs from this earlier work in two important respects:

1. Braddock et al. proceeded by summarizing existing research and by identifying five exemplary comparison-group research studies. By contrast, contributors to this volume review very little research except insofar as it helps explain the new lines of inquiry being developed in their chapters. Further, when authors in this volume describe anticipated or ongoing research studies, they are not concerned with illustrating conventional methodologies. Rather, their intent is to suggest what seem like useful ways we might begin to lift ourselves out of our own ignorance.
2. When Braddock et al. identified new questions that seemed likely to lead researchers into "unexplored territory," they emphasized the sort of pedagogical, comparison-group studies mentioned earlier. Although they raised questions (e.g., "What is involved in the art of writing?") that could lead to basic research, the emphasis in their book—certainly in the five

studies they reviewed at length—was on studies that apparently assumed we already had a thorough understanding of written products and processes. Unlike researchers cited by Braddock et al., contributors to this volume make no such assumption. Rather, they raise questions that invite us to examine, test, and modify our basic assumptions about written composition. Ultimately, comparison-group research may enable us to improve instruction in writing, but that research must be informed by carefully tested theory and by descriptions of written discourse and the processes by which that discourse comes into being.

Our contribution to this volume, written in collaboration with Cynthia Courts, begins the close questioning of basic concepts in the field. After a brief introduction to recent discourse theory, we suggest in the first chapter ways researchers might test that theory directly by identifying and questioning some of the theory's major assumptions. We also ask researchers to consider one crucial epistemological assumption: whatever researchers learn is tentative, subject to continual revision; perhaps the most difficult thing researchers have to do is accept this tentativeness and be willing to participate in this ongoing revision.

In chapter 2, James Britton both explains some of the theory underlying his own research in composition and poses some questions that need careful investigation. In his previous work, Britton has set up three "function categories" for writing: transactional, expressive, and poetic. He describes these categories and points out several questions arising from the distinction between poetic and transactional writing, e.g., Do different types of writing place different demands on writers? Does each type of writing make somewhat different demands of readers? Britton also asks questions that deal with the stages of the composing process: What is the role of "incubation" in the writing process? Does it have equal importance in both poetic and transactional writing? How can researchers investigate the process of articulation—the process of actually putting words on a page?

Richard Young reminds us in chapter 3 that research questions grow out of the theories that researchers accept. An important consequence for research on composing has been the absence of work on the problem of invention—the problem of discovering what one wishes to write about—because, as Young points out, many researchers have based their investigations on a theory of rhetoric that largely ignores invention. Young describes four theories of

invention and raises such questions as: What theory (or theories) seems most adequate? By what criteria should we judge the adequacy of these theories? How would a historical perspective influence our evaluation of these theories of invention? He also reminds us that our research must itself be theoretically well grounded and that we must test, as well as use, the theory that guides our work.

In chapter 4, Loren Barritt and Barry Kroll draw upon recent work in developmental psychology to outline differences and similarities between written composition and speech; they also describe several basic themes in developmental psychology and raise research questions arising from these themes. Barritt and Kroll conclude by arguing that we should not restrict ourselves to any one research methodology. Like Barritt and Kroll, Janet Emig (chapter 5) shows us how to go beyond the usual boundaries and familiar questions of our own disciplines. Rather than referring to rhetorical theory or existing research in written composition, she concentrates on quite different areas of inquiry, her main question being, What is psychologically and physiologically organic to the composing process?

In chapter 6, Walter Petty advocates a more conventional approach: study of the processes young children use to compose in school classrooms. He recommends that we proceed by (1) observing the act of writing, including interactions among students and between students and their teachers during writing and afterwards; (2) observing the effects of environment on writing; (3) interviewing writers; and (4) studying children's choices of topics. Petty encourages us to study carefully only a few students at a time and to report our data and conclusions as case studies.

Although concerned with the entire process of composing, Donald Murray (chapter 7) focuses primarily on revision, the stage at which one has completed an initial draft and is ready to try to "understand and communicate what has begun to appear on the page." Based upon his own experience and that of other professional writers, he discusses four major ways writers may go about developing a meaning which they can communicate to a reader. He poses a number of questions and procedures that can lead to a clearer understanding of revision, and he suggests how research findings may influence the ways writing is taught.

Gabriel Della-Piana's chapter conveys an important attitude toward research and research procedures, in addition to raising new research questions and ways to pursue them. In chapter 8, Della-Piana recognizes the complexity of the research problems he is interested in, and his conclusion warns against assuming that one

might finally learn all there is to know about the composing process. As do Barritt and Kroll in chapter 4, Della-Piana points out that we need not examine the composing process from a single theoretical perspective or with a single research procedure. Thus, in his discussion of revision, Della-Piana details a variety of ways we might fruitfully explore this aspect of the writing process.

The collection concludes with two chapters by individuals who are not themselves researchers but who offer ideas and insights researchers will find provocative. A poet, essayist, and teacher, Phillip Lopate concentrates in chapter 9 on the problems young children have in starting to write in classrooms, particularly in making the transition from talking with the group to composing alone. These problems imply a number of questions researchers will need to explore in the years ahead. Instead of spelling out these questions, Lopate, in a letter to us, made this observation: "I would rather have my experiential descriptions exert an 'evocative' influence on [the reader of this volume], and let him take whatever he wants from them to advance his thoughts, than try to bluff my way down research avenues for which I have no methodological training, background and drive."

John Schultz (chapter 10), like Young in chapter 3, is concerned with the problem of invention. Also like Young, Schultz assumes that one may identify conscious, knowable strategies which can stimulate the process. He describes a specific set of teaching procedures—what he refers to as "Story Workshop"—illustrating them with numerous references to actual workshop sessions. His advocacy of these procedures should not blind us to the unusual and compelling assumptions underlying his program. For example, Story Workshop assumes that the creative process can be enhanced by a director who coaches workshop participants, giving them directions to help them perceive more fully the experience they will eventually write about. What accounts for the apparent effectiveness of these directions? Is it a matter of the substance of the director's comments? Or is it simply a matter of a student having an audience that makes some sort of response—not necessarily those Schultz describes—to his or her ideas? What would happen if the role of the director were varied or eliminated? Is a director more important for some people than others? In developing as a writer, does one go through stages when a director is especially helpful (or unhelpful)? Is direction more useful at some stages of the composing process than at others? Are there kinds of direction that are clearly more helpful than others?

Just given the sheer number of assumptions, theories, methods,

and questions relevant to composing, achieving a better understanding of our field will be difficult. We will have to raise questions that heretofore have seemed unaskable; we will have to devise new procedures for obtaining answers; and we will have to be patient and allow these new techniques time to yield the answers we seek. Most difficult of all, we must be prepared to accept a provisional understanding of our field with new questions and procedures far outnumbering undisputed facts and proven methods. Such new questions and procedures are the main concern of this book.

1 Discourse Theory: Implications for Research in Composing

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According to Warriner's *English Grammar and Composition*—a typical practical stylist handbook, perhaps the one most widely used in public schools—the chief problem in writing well is choosing language, syntax, and organizational patterns that are consistent with the practice of "educated people," those whose speech and writing define "good English." This practice, supposedly distinguished by such characteristics as correctness, conciseness, and clarity, is appropriate for every situation in which one is "writing carefully." In all these situations—"serious articles, 'literary essays,' essay-type answers on examinations, research papers, and formal speeches"—a writer adopts a polite, earnest persona that is eager not to confuse or offend an audience that has assimilated the principles of standard English. By and large, the writer's chief purpose is to present information and ideas in a clear, orderly fashion to an audience that, so far as we can determine, has no emotional investment in either the writer of the piece or in the subject being discussed. In judging writing, Warriner makes the assumption that the qualities of "good" writing remain essentially the same, no matter what the mode or purpose of the writing.

It seems pointless to attack the point of view epitomized in Warriner's text; we can just let I. A. Richards (1936) dismiss it with his phrase "the usual postcard's worth of crude common sense." We refer to Warriner only because his text helps clarify by contrast a new set of assumptions about discourse. It may not be accurate to speak of these assumptions as a new paradigm; the present state of

discourse theory may only be, as James Kinneavy (1971) claims, "preparadigmatic." There is no single set of terms and no single well-established, widely shared body of knowledge that constitutes modern discourse theory. But we may at least speak of an *emerging* paradigm since different scholars are exploring theories that overlap in interesting and useful ways. In the remainder of this chapter, we shall discuss two of the major assumptions of this emerging paradigm and then suggest four different kinds of questions that should help researchers test and refine these assumptions.

Assumptions in Current Discourse Theory

Assumption 1: purpose in discourse. Typically, practical stylist handbooks pay a great deal of attention to the modes of discourse—narration, description, exposition, and argumentation—but say relatively little about the purposes of discourse. These texts do refer to the purposes of individual sentences (asking questions, making statements, etc.); their discussions of analysis and argumentation also imply persuasive or informative purposes. Yet these texts do not discuss other purposes such as expression, nor do they explain how different rhetorical purposes might influence one's choice of diction, syntax, or mode.

Recent discourse theory, by contrast, gives a great deal of attention to purpose in discourse. Kinneavy (1971) goes so far as to claim that "purpose in discourse is all important. The aim of discourse determines everything else in the process of discourse" (p. 48). This interest in purpose does not suggest that modes of discourse are unimportant. But Kinneavy does argue that the modes are important only as the means by which one attempts to accomplish a given purpose. Skill in narration, exposition, or description is of little use unless that skill serves some larger rhetorical purpose. Consequently, Kinneavy asserts, "both a theory of language and a theory of discourse . . . should be crowned with a viable framework of the uses [or purposes] of language" (p. 38).

Scholars disagree as to how we might categorize these purposes. James Britton describes three major purposes of discourse—expressive, transactive, and poetic—while Kinneavy identifies four—expressive, literary, persuasive, and referential. Since Britton's theory appears later in this volume, we shall concern ourselves chiefly with Kinneavy's work.

According to Kinneavy (1971), the aim of reference discourse, which includes scientific, exploratory, and informative discourse, is

to "designate or reproduce reality" (p. 39). This discourse type is characterized by such qualities as concern for factuality, comprehensiveness, and careful use of inductive and deductive reasoning. Its chief focus is the subject at hand. By contrast, persuasive discourse focuses on the audience; the aim is not to designate reality but to induce some practical choice or to prompt an action (physical, intellectual, or emotional). Expressive discourse aims simply to articulate the writer's personality or point of view. Unlike persuasive discourse, expression makes little effort to bring about change in the audience. The primary goal of literary discourse is neither to discover truth nor to induce change nor to display the writer's own attitudes and ideas. Its purpose is rather to create a language structure "worthy of appreciation in its own right" (p. 39).

For Kinneavy, attempts to accomplish these four different purposes entail different thinking processes and result in pieces of discourse that have distinctive stylistic features and organizational patterns. Consequently, as both Kinneavy and Richard Lloyd-Jones (1977) suggest, it may be that skill in accomplishing one rhetorical purpose does not necessarily imply skill in accomplishing another, that "the writer of a good technical report may not be able to produce an excellent persuasive letter to a city council" (Lloyd-Jones, p. 37).

Assumption II: speaker, subject, and audience. As was the case with purpose, the relation of speaker, subject, and audience receives little direct attention in practical stylist handbooks. Occasionally, these texts offer advice that might help one avoid appearing "foolish" or illogical, and Warriner in particular cautions against losing the "respect" of one's audience. But these texts seem almost arhetorical. One makes decisions about diction or syntax on the basis of certain principles that are, at best, useful for developing only one kind of persona and appealing to only one kind of audience. Writers of texts such as Warriner's acknowledge that one's language must be appropriate to the "occasion" for which one is speaking or writing. They assume, however, that knowledge of the conventions of "standard" English will, in Warriner's words, let a student "easily find the answer to almost any language problem he is likely to encounter" (p. iv). They never suggest that one may have the problem of choosing between two equally "correct" words or syntactic patterns.

Current theorists, however, assume that one's choices must be guided by a complex awareness of speaker, subject, and audience, not by a single set of conventions. Writers such as Walker Gibson (1969), James Moffett (1968), and Kinneavy (1971) refer to Aristotle's notion that effective persuasion requires one to establish a plausible ethos,

create a desired attitude in the audience, and demonstrate the truth, "real or apparent," of the arguments one is advancing. Gibson, Moffett, and Kinneavy, however, go well beyond this point of view. For these writers the relation of speaker, subject, and audience is not only important in persuasion but is basic to all types of discourse. Moreover, Kinneavy and Moffett clearly agree with Gibson's claim that speaker, subject, and audience exist in "a constantly shifting interplay of relationships. Argument and audience affect voice, and the total impact of any communication is surely more or less an amalgam of all three" (p. xi).

Moffett and Gibson have tried to describe the different forms these communication relationships might take. Both writers assume that shifts in the *relation of speaker and audience* are a matter of "distance" between speaker and audience. Gibson sets up a continuum of speaker-audience relationships ranging from "intimate" to "formal." Rather than attempting to describe stages or discrete points along that continuum, Gibson simply talks about the relative intimacy or formality of the speaker-audience relationship in specific pieces of discourse. He does not define "intimate" and "formal" except to identify some of the characteristics of the "writer-style" language of formal speaker-audience relationships and the "talker-style" language of informal relationships. Gibson suggests, almost in passing, that "the metaphor of physical space," i.e., the literal distance between speaker and audience, helps account for the relative intimacy or formality of a speaker-audience relationship (p. 53). This notion of physical distance, combined with distance in time, is much more fully elaborated in Moffett's theory. Moffett (1968) describes a continuum that begins with interior monologue, in which speaker and audience are identical, and moves to dialogue, in which speaker and audience are separate but still close in time and space. At subsequent points on Moffett's continuum (see *Teaching the Universe of Discourse* for a complete description), speaker and audience are more and more remote; one speaks or writes for an increasingly large audience, one that is not present and cannot provide any immediate response to one's message.

When he describes shifts in the *relationship of speaker and subject*, Gibson talks about changes in attitude, ranging from "honorific" to pejorative, toward a subject. As with his discussion of intimate and formal speaker-audience relationships, Gibson does not try to designate specific stages along the honorific-pejorative continuum. Moffett, however, identifies several stages along the continuum he

describes. At one extreme, one talks about "what is happening," recording unselectively the phenomena that occur at the moment one speaks or writes. As one moves along Moffett's continuum, one writes about subjects that are increasingly remote in time and space; that is, one abstracts from previous experience and reports about "what happened." Then one generalizes about recurrent phenomena, about "what happens." And finally one theorizes about "what will or might happen." As a result of extensive research on the writing of school-age children and adolescents in England, Britton (1971) has elaborated Moffett's four-stage speaker-subject continuum into seven stages: record, report, generalized narrative or descriptive information, analogic (low level of generalization), analogic, speculative, and tautologic.

In suggesting the diverse speaker-subject-audience relationships one may find in written discourse, Gibson does not refer to any theoretical framework. Moffett, by contrast, shows how changes in speaker-subject-audience relationships parallel changes in people's intellectual development, a movement from egocentered to decentered functioning. Egocentric discourse, Moffett says, is characterized by a speaker talking to him- or herself or an immediate audience—a friend, say—about phenomena that presently exist. As one becomes more decentered, one is able to address remote audiences about subjects that are not part of one's present, firsthand experience. Moffett specifically denies that any one speaker-subject-audience relationship is more important than any other. His interest is not solely in preparing students to write highly decentered discourse but in enabling students to move easily along the egocentered-decentered continuum and to know where they are at any one point along the continuum.

Questioning Basic Assumptions

Recent discourse theory is rich with possibilities for basic research. In the next few pages, we shall suggest only a few possibilities, deriving our questions from our brief discussion of the purposes of discourse and of relationships between speaker, subject, and audience. Obviously, our suggestions cannot be exhaustive or definitive. Almost every page in, say, Kinneavy's *A Theory of Discourse* or in Britton's work on discourse theory (this volume and 1971; see also Britton, Burgess, Martin, McLeod, & Rosen, 1975) will help researchers raise additional questions.

Questions about the Process of Composing

How do writers actually go about choosing diction, syntactic and organizational patterns, and content? Kinneavy claims that one's purpose—informing, persuading, expressing, or manipulating language for its own sake—guides these choices. Moffett and Gibson contend that these choices are determined by one's sense of the relation of speaker, subject, and audience. Is either of these two claims borne out by the actual practice of writers engaged in drafting or revising? Does either premise account adequately for the choices writers make? Do the two assumptions together provide an adequate account? Could either or both of these assumptions be modified so as to produce a more satisfactory description of the composing process? Or do writers make choices that cannot be explained by a consideration of purpose or of speaker-subject-audience relationships?

Are there important differences between the practice of extremely skillful writers and less competent writers? Are there factors (e.g., previous experience in writing) that influence the bases one uses for making choices? Do these bases change as one moves through the stages of the composing process? That is, might there be points at which, say, considerations of purpose are more important than considerations of persona or audience?

The work of Donald Graves (1975), Janet Emig (1971), and others (see Walter Petty's chapter in this volume) persuades us that the process of composing is a very promising area for research. Compelling as they are, the theories of Moffett, Gibson, and Kinneavy are based largely on an analysis of written products. If we are to use this theory in researching the composing process, it seems essential that theory be informed by analysis of this process. Admittedly, data for this sort of analysis will be hard to obtain. A recent study by Cooper and Odell (1976) supports Emig's claim (1971) that even highly competent professional writers have difficulty articulating the basis on which they make decisions about what they say and how they say it. As one of the professional writers in the Cooper and Odell study remarked, these processes become so automatic that one is scarcely aware of them. Moreover, as Emig (1971) points out, writers' accounts of the composing process are likely to focus on the writer's feelings or on the context in which the writing took place rather than on the decisions and choices involved in the act of composing. To try to avoid this problem, Cooper and Odell made changes in writers' works and then asked them whether they could accept these changes. This procedure enabled writers to provide a great deal of information

about why they had made certain decisions in their original drafts. Studies of the revision process (see chapters by Donald Murray and Gabriel Della-Piana in this volume) may suggest another way to explore the process of composing. As we examine successive drafts of manuscripts, we should be able to identify points at which writers have made revisions and ask such questions as: Are there distinct patterns in their revisions? Do these revisions suggest a sharply increased sense of purpose or speaker-subject-audience relations? If we were to ask writers to explain their revisions, what sorts of reasons would they use to justify their choices? Would these reasons be consistent with the theories of Kinneavy, Moffett, or Gibson?

At first glance, the design problems for studies of the actual psycholinguistic process of composing a piece of writing seem nearly insurmountable. The cognitive processes of composing are complex and not directly observable. Consequently, we must study them in ways that generate data from which we can make strong inferences about the processes. How can we design such studies? Besides the procedures in the Cooper and Odell study, Emig's "composing aloud" (1971), and the procedures for studying revision in the Della-Piana and Murray chapters in this volume, what can we recommend? We can look carefully again at the designs cognitive psychologists have used to study such concepts as traces, ideas, associations, schemata, structures, clusters, habit-family hierarchics, response strengths, strategies, subsidiary and focal awareness, transformations, covert trial and error, primary and secondary process thinking, and executive routines. In a study of the structure and functions of fantasy, Klinger (1971) even makes use of behaviorist notions of operant and respondent activity to distinguish fantasy from other cognitive activity and to explain the sequential segments in the structure of a fantasy. As to particular methodology, Emig (1971) has recommended using time-lapse photography or an electric pen to record the unfolding of a written piece. More satisfactory than either of those, we believe, would be to videotape separately the transcription and the writer as a piece is being written. From above the writer and at a slight angle, one camera could be focused on the writing paper, which would be affixed to one spot on a writing table. From the side, another camera could be focused on the writer. The researcher would then study the parallel videotapes and the completed piece of writing. What might we learn if we ask a writer, experienced and comfortable with this writing situation, to write several pieces each of expression, persuasion, and explanation? Using Emig's (1971) characterization of the composing process as a guide, would we be

able to observe differences in the process of composing for different purposes or in different modes? A subject might even be willing to make certain kinds of diary entries in this experimental situation or write certain personal letters.

The procedures we are recommending assume that the composing process can only be studied as a process we observe unfolding in time. There remains the possibility, however, that we can learn some things about the process of composing merely by studying written products.[1]

Questions about Published Writing

What is the most comprehensive yet manageable way to categorize the aims of published pieces of writing? Do we need to have an entirely separate category for literary or poetic (we assume the terms are roughly synonymous) discourse? Is poetic discourse something qualitatively different from, say, persuasive discourse? Would it be possible—theoretically and practically—to talk about the literary qualities of a piece of expressive, explanatory, or persuasive discourse? Or as Britton (1971) has suggested, should we classify literary or poetic discourse as primarily expressive, explanatory, or persuasive? If we choose Britton's approach, how do we classify for research purposes novels or long stories that are a mixture of expressive, explanatory, or persuasive?

Another way to pose our basic question here is to ask whether readers could be trained to use, say, Kinneavy's description of discourse types to distinguish between pieces of discourse. What problems might readers have in categorizing pieces of published writing according to their purpose? Would these problems lead us to refine Kinneavy's categories? Would these categories lead us to ignore distinctions that we feel are important? For example, would we be forced to lump together under *expression* pieces of writing that intuition tells us are quite dissimilar?

What is the most satisfactory way to categorize the different speaker-subject-audience relationships apparent in published writing? Suppose one were to ask readers to arrange a large number of published writings along the continua (intimate/formal; honorific/pejorative) described by Gibson. Would readers be able to use Gibson's continua to make reliable judgments? Would there be pieces readers could not locate on either of these continua? Would it be

1. Odell, L., & Cooper, C. R. *Written products and the writing process.* Unpublished manuscript, State University of New York, Buffalo, 1977.

possible to modify Gibson's continua so as to account for all these pieces of writing, or would it be necessary to devise new continua?

Suppose readers were able to categorize published writings according to their purpose or speaker-subject-audience relationship. Would expressive writing consistently display patterns of word choice, syntactic choice, or thought processes that were substantially different from those patterns found in writings identified as persuasive? What analytic procedures would be most satisfactory for identifying specific features of word choice, syntax, or thought processes? For example, would a relatively simple procedure such as type-token ration allow one to distinguish between word choice in expressive discourse and word choice in persuasive, literary, or reference discourse?

In raising these questions about written products, we have in mind studies by Francis Christensen (1967), Richard Meade and W. Geiger Ellis (1970), and Richard Braddock (1974). All of these researchers found that analysis of published writing tended to discredit or weaken some of the claims made in practical stylist textbooks. Warriner's text, for instance, asserts that there are seven common methods of developing a paragraph. But when Meade and Ellis tried to identify these methods in published writing, they found that 56 percent of the 300 paragraphs they examined from current sources did not allow *any* of the patterns recommended in Warriner and that the remaining 44 percent followed only 2 of the 7 recommended methods of development.

The research of Meade and Ellis and others argues for a healthy skepticism not directed solely at practical stylist rhetoric: researchers must test *all* claims and assumptions about discourse by trying to apply them to a large number of actual pieces of published writing.

Questions about Writing Done at Different Age Levels

Are there holistic features (i.e., what Lloyd-Jones calls primary traits) that appear to be characteristic of, say, the expressive writing of seventeen year olds and that rarely or never appear in the expressive writing of nine year olds? If so, exactly what are those traits? Do they seem inextricably related to a writer's intellectual development, or does it seem that they may be taught to writers of almost any age? Are there atomistic features (e.g., qualities of syntax and intellectual processes) that seem characteristic of the expressive writing done by seventeen year olds but not of the expressive writing done by nine or thirteen year olds? We assume, for example, that writers at all ages

make use of certain basic intellectual processes (contrast and classification, for instance). Yet we have some basis for thinking that highly competent writers use these processes in ways that differ from the practice of less sophisticated writers.[2] Consequently, we wonder: When trying to accomplish a given rhetorical purpose, do older writers differ substantially from younger writers in their use of certain basic intellectual processes?

Are there ages at which writers do not vary their writing according to their rhetorical purpose? For example, if nine year olds were asked to do several expressive writing tasks and several persuasive writing tasks, could trained raters reliably distinguish between the nine year olds' persuasive and expressive writings? Could one find significant differences between specific features of nine year olds' persuasive writing and nine year olds' expressive writing? Would one be able to identify greater differences between the expressive and persuasive writing of thirteen-year-old writers? Do writers at different age levels have more success with one type of discourse than with others? Could it be, for example, that nine year olds seem to have greatest success with persuasive writing, whereas seventeen year olds seem to have their greatest success with explanatory or persuasive writing?

At a given age level, and within a given type of discourse, do changes in the speaker-subject-audience relationship result in changes in the holistic features of one's writing? Do changes in this relationship result in changes in diction, syntax, or thought processes? Are these changes likely to be more pronounced at one age level than at others? For example, when nine year olds attempt to do persuasive writing, are they as sensitive as thirteen year olds to the demands of a specific speaker-subject-audience relationship? What features of word choice or syntax would most accurately reflect this sensitivity? Do different discourse types increase the chances that writers (at all ages and at specific age levels) will be sensitive to the demands of a specific rhetorical context? That is, are writers more likely to be sensitive to the demands of a given speaker-subject-audience relationship when they are writing persuasively than when they are writing expressively? We have raised these questions about writing performance at different age levels because the work of Kellogg Hunt (1965, 1977) and our own experience persuade us that writing performance differs greatly according to age level. Conceivably, a theory that is borne out by analysis of writing done at one

2. Odell, L., & Cooper, C. R. *Written products and the writing process.* Unpublished manuscript, State University of New York, Buffalo, 1977.

age level might not be borne out by writing done at some other age level. Such a theory would seem, at best, extremely limited and in need of substantial modification.

Questions about Eliciting and Assessing Writing Performance

Should researchers accept Lloyd-Jones's claim that one's skill with one sort of discourse (persuasion, for example) might be significantly different from one's skill with other types of discourse? Suppose a researcher were to identify writers who were recognized as competent in one discourse type and asked those writers to perform writing tasks in a different discourse type. How would their writing differ from that of writers who were supposed to excel in the second discourse type? Would the writing of public school students reflect Lloyd-Jones's assumption? Suppose a researcher were to give writing tasks in three discourse types to a number of students. Would one find that students who were rated superior in one discourse type were never (rarely? occasionally?) rated superior in other discourse types?

How should researchers frame a writing task so as to obtain the best possible work from students? Must researchers, as Sanders and Littlefield (1975) claim, provide a full rhetorical context, that is, information about speaker, subject, audience, and purpose? Is there any aspect of the rhetorical context that we need not include in a writing task? Would an assignment that, for example, specified speaker, subject, and audience but not purpose elicit writing that differed significantly from writing prompted by an assignment that specified a full rhetorical context?

Should we accept Lloyd-Jones's notion that a given piece of discourse should be judged only by criteria that are appropriate to the specific purpose for which the piece was written? (Sanders and Littlefield accepted this point of view, but results of their study provide no support for it.) Are there generic criteria for each discourse type? Can we identify norms for, say, persuasive writing that will let us make a fair, informative assessment of quite different pieces of persuasive discourse? Or must we do as Lloyd-Jones did and devise separate scoring guides for each individual writing task?

In all of these questions, we have been concerned with achieving assessment procedures that are valid, useful to students, and reasonably practical for researchers and teachers. Lloyd-Jones (1977, p. 45) reports that devising an adequate scoring guide for a single task in the National Assessment writing sample could take eighty hours or more. This sort of investment in time and effort is out of the

question for most teachers and many researchers. It seems important to find out whether we can make compromises that will let us have a valid but practicable means of assigning writing and assessing writing ability.

This attempt to make compromises leads us back to basic theoretical issues. Suppose researchers were to find that, for example, explicit statements about purpose could be omitted from writing assignments without affecting writers' performance on those assignments. If this were the case, one would have to consider the possibility that, at least under some circumstances, purpose in writing might not be as important as Kinneavy (and we) think it is.

A Final Consideration

Throughout this chapter, we have made a number of references to specific questions researchers might pursue. We would be delighted if these questions lead to new understanding of written products or the composing process. Yet we assume that questions and understandings alike will be subject to continual revision; an exhaustive description of writing performance will mean only that we have exhausted our own resources for asking and answering questions, not that we have exhausted the complexities of our subject. Consequently, we share an attitude Moffett has expressed about a segment of his *Teaching the Universe of Discourse*: "The theory of discourse that makes up most of this chapter is meant to be utilized, not believed. I am after a strategic gain in concept" (p. 15). We anticipate that the process of answering existing questions or seeking support for existing assumptions will lead to new information and new assumptions. Thus, we are interested not only in gaining information but also in refining our ability to gain information, learning how to ask further questions, and doing what we can to insure that we and other researchers continue to make strategic gains in concept.

2 The Composing Processes and the Functions of Writing

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Research practices, like those of schools and testing agencies, have sometimes mistakenly treated writing as a single kind of ability, regardless of differences in the reader for whom it is intended and the purpose it attempts to serve. Thus, Kellogg Hunt (1965) bases his index of maturity in writing (the Minimal Terminable Unit) upon any thousand words produced in school by each child in the sample. While it may be held that the intended reader in the children's minds was uniformly the teacher, the nature of the tasks attempted was diverse in a random way. He found significant increases in T-Unit length from grades four to eight to twelve, but then noted that by his measure Faulkner's novels rated a high grade, those of Hemingway a low grade. One might infer that the technique is capable of yielding more information than is to be derived when it is used in a "global" way—that is, when writing functions are ignored. In fact, a member of our research team (Rosen, 1969) applied it to functionally differentiated writings (e.g., a story, a piece of exposition, an argument) and came to a conclusion of a different order, namely that the most able writers tended to produce the greatest variations of T-Unit length from one function to another.

The Writing Research Unit at the University of London Institute of Education was funded by the Schools Council in 1967 for the purpose of studying the development of writing abilities in students throughout their secondary schooling. Our early studies confirmed the suspicion that there were no existing categories adequate to describe differences between one piece of school writing and another. Before attempting to plot development, therefore, it was necessary to work out a taxonomy, and it is this first stage that will be under

In all I have written here, I gratefully acknowledge the work of my colleagues in the Writing Research Unit, Nancy Martin, Dr. Harold Rosen, Tony Burgess, Dennis Griffiths, Alex McLeod, and Bernard Newsome.

consideration in this chapter. In the second stage we made a four-year follow-up study of eleven and fifteen year olds in five schools, but this part of the project is still being completed. Stage one is fully described in a recent publication (Britton, Burgess, Martin, McLeod, & Rosen, 1975), and I will not attempt to summarize it here. Instead, this chapter will take up one or two points arising from the theory adumbrated in the course of the project and sketch in enough of the research procedures and findings to provide a framework for those points.

We took it for granted that no one set of categories could adequately describe differences among school writings and that a number of variables would have to be identified and categorized. We worked out and applied two such variables and left two others in limbo. Our data comprised 2,000 scripts covering a range of school subjects, produced by 500 boys and girls in their first, third, fifth, and seventh years of secondary schooling in 65 schools scattered over England and Wales. With each script was a brief note by each student's teacher indicating the context in which the work was done and commenting upon the ability of the class.

A study of composing *processes* was focal to the work of the project, and, although we had little more than the products to go by, our taxonomies were developed in the light of our understanding of those processes. We worked on a set of categories that attempted to describe the degree to which a writer appeared to make the teacher-set task his or her own. At one end of the scale were those scripts that reflected perfunctory work, minimal attempts to satisfy demands the writers did not themselves endorse; at the other end, performances in which writers made demands of themselves, so endorsing the teacher's intentions that they became virtually indistinguishable from their own. We noticed that when this happened in the course of the writing (as it frequently did), it was as though a tide had risen and changed the landscape. Starting our analysis with "perfunctory" and "involved" as categories, we found we needed a third, which we called "impelled." Here the work gave the impression that the writer would not have been easily distracted or dissuaded from his or her undertaking, that the writer was in the grip of the topic rather than in control of it. An occasional fantasy story (maybe a retelling of a television drama) came into this category, but it remained a very small set.

We were interested also in the resources a writer appeared to draw upon in a piece of work. We found a few scripts in which a student

would attempt to tell a story almost entirely in quoted dialogue. For example:

> "Oh Mummy do you think it would be all right to go and watch daddy? Well I shall want some shopping, it will be closing day tomorrow. All right I will go for you. . . ."

Taking this to be an example of extremely limited linguistic resources on the part of the writer, we thought it might be possible to plot the types of resources reflected in a piece of writing along these lines: spoken dialogue, spoken monologue, the written language of stories, and a particular written model (author or book).

I would not say that "degree of involvement" and "linguistic resources" are blind alleys, but certainly they remain unexplored. By contrast, when we came to tackle two more basic questions about writing—Who is it for? and What is it for?—we found both that we had as much on our hands as we could deal with and perhaps, in terms of the information yielded, as much as we needed for our present purposes.

"Sense of Audience" Categories

It is inherent in traditional educational procedures that where school writings are concerned, the answer to Who is it for? must usually be the teacher. While we looked also for other audiences such as a peer-group or a public audience, we sought our data mainly by subdividing "teacher" into a number of teaching roles or student-teacher relationships. Thus, the second party named in each of the following categories refers to the teacher who set the writing task:

Child (or adolescent) to trusted adult

Pupil to teacher, general (teacher-learner dialogue)

Pupil to teacher, particular relationship (based on a shared interest in a curriculum subject)

Pupil to examiner

Our trial analysis of 2,000 scripts written by 500 secondary school pupils revealed that 2 categories—pupil to teacher, general, and pupil to examiner—covered between them 88 percent of the scripts (39 percent in the former and 49 percent in the latter). Considering that we had formulated six other categories of audience relationships in addition to the four student-teacher relationships, we were disappointed; but we were somewhat mollified by the fact that some

scripts did find their way into each of our ten categories. (For a complete description of the audience categories, see Britton et al., 1975).

"What Is It For?": Function Categories

The purposes that can be served by a piece of writing must surely be manifold. A writer's intentions may be devious or idiosyncratic; the effects upon a reader may be idiosyncratic, unforeseeable, and chain-like, with no clearly defined cutoff point. Yet the function of any piece of writing must be essentially related in some way both to what a writer intends by it and how readers are affected by it. Mercifully, linguists have had to deal with this sort of problem before; their solution is to limit their concern to what is *typical* within the conventions that govern discourse. The context in which an utterance is made must be held to include recognition by writer and reader of these conventions. As Lyons (1964) has put it, "I consider that the idea of context as 'universe of discourse' (in Urban's sense) should be incorporated in any linguistic theory of meaning. Under this head I include the conventions and presuppositions maintained by 'the mutual acknowledgment of communicating subjects' in the particular type of linguistic behaviour (telling a story, philosophizing, buying and selling, praying, writing a novel, etc.)" (pp. 83–84).

Our three principal categories of writing functions—transactional, expressive, and poetic—are intended to mark out two spectra located as follows:

Transactional ←——— Expressive ———→ Poetic

Behind the two spectra lies a duality that raises most of the issues I want to take up here. The spectrum from expressive to transactional covers what we want to call "language in the role of participant," that from expressive to poetic, "language in the role of spectator." This is a distinction that has origins in Susanne Langer's (1942) "discursive" and "presentational" symbolism and, more specifically, in D. W. Harding's notion (1937, 1962) of "the role of the onlooker."

Harding distinguishes four modes of response to experience: the operative (when we participate in events), the intellectual (when we seek to comprehend without any attempt to modify), the perceptual (when the experiencing and organizing of perceptions is enough), and the "detached evaluative response" of a spectator. While all four modes may contribute to any experience, one is likely to predominate and characterize our response to any situation. In the first mode, as

participants we evaluate in order to take part in events, yet our evaluation in this case must subserve our participation; hence, we evaluate under the constraints of self-interest, in the light of our hopes and fears regarding the outcome. In the fourth mode, as spectators we do not stand to gain or lose by the outcome; our evaluation is thus not subject to the constraints of prudence or self-interest. (The femme fatale who watches rival suitors fight a duel is not, in our sense, a spectator!)

Harding's next step is the one that most concerns us here. He goes on to identify as "imaginary spectatorship" all those occasions in which we talk, write, or read about past events, our own or other people's experiences, or about the imagined events of dream or fiction. In gossiping about events, as most of us do every day, speaker and listener are both in the role of spectator: the events recounted are not *taking place*—hence, no one can participate in them—and they are reconstructed solely for contemplation by speaker and listener. Harding points out that in their choice of events to recount, speakers reveal something of the values they place upon events; and in the way they tell their story—their loaded commentary—they are likely to offer their evaluation even more sharply. What speakers demand from their listeners, whether by nod and grimace or by verbal response, is "feedback" to their evaluation, that is, the sanctioning or modification of the evaluation they offer and hence of the value system by which they manage their existence in the world. If gossip about events constitutes informal language in the role of spectator, then literary fiction—the novel, the story, the play—represents the formal or fully developed end of the scale: "Fiction has to be seen, then, as a convention, a convention for enlarging the scope of the discussions we have with each other about what may befall" (Harding, 1962, p. 139). At the level of social interaction there is, by this view, an exchange of evaluations between authors and their readers, an exchange in which reputations are made and lost, influences wax and wane, values gain and lose currency, and the cultural pattern of a social group is sustained and evolved. Putting the point as broadly as possible, as participants we *apply* our scale of values, as spectators we are concerned to *generate* and *refine* it. While this applies primarily and directly at the level of individuals, it has also its application at the social level. Notice that the agenda of human experience upon which we base our evaluating is not limited to our own firsthand experiences: as participants we have only one life to live; as spectators an infinite number are open to us.

Let me add in parentheses that corroboration of the notion that

the tales we exchange about our experiences have an evaluative function has recently come to me from an unexpected quarter. Labov and Waletzky (1967) collected oral narratives of personal experience, mainly from working-class speakers, simply by asking some question as, "Were you ever in a situation where you were in serious danger of being killed?" In carrying out a rigorous linguistic analysis of their recordings, they identified two types of clauses: narrative and evaluative. When occasionally they came across a narrative that had no evaluative clauses and no implied evaluation on other forms, they labeled it an "empty or pointless narrative." In other words, even in the rather artificial circumstances set up for research purposes, the essential evaluative purpose of gossiping about our experiences asserts itself.

For the practical task of classifying written utterances according to function, we reduced Harding's four types of response to two: his first and second modes (operative and intellectual) were conflated into our participant role; his third mode (perceptual) we felt we could safely ignore since there was no obvious way in which language could serve its purposes. His fourth mode is entirely the equivalent of our second, language in the role of spectator. As has been indicated, the two roles are related to three major function categories: transactional language is fully developed to meet the demands of participants; poetic language is fully developed to meet the demands of a spectator role; and expressive language is informal or casual, loosely structured language that may serve, in an undeveloped way, either participant or spectator role purposes. We have said a good deal about the importance of expressive writing elsewhere (Britton et al., 1975)—particularly its educational value as a matrix from which, in favorable circumstances, both transactional and poetic writing are developed. My concern here is with the contrasting spectra: writing in the role of participant (the spectrum from expressive to transactional) and writing in the role of spectator (the spectrum from expressive to poetic).

Writing in the Role of Participant

As participants we use writing "to get things done," whether it be in an operative mode of informing, instructing, or persuading people or in an intellectual mode of problem solving, speculating, theorizing. An utterance in this category is a means to some end outside itself, and its organization will be on the principle of efficiency in carrying out that end. Of the many types of verbal transactions possible

(buying, selling, begging, vowing, etc.), we homed in on two that seemed of importance in school: thus the two principal subcategories of the transactional are the conative and the informative (see Jakobson, 1960, pp. 353 & 357, for a similar distinction). The conative we further divided into regulative (where compliance is assumed) and persuasive (where no such assumption is made). Informative writing we divided in accordance with James Moffett's "abstractive scale," as described in his *Teaching the Universe of Discourse*, but we distinguished seven levels of abstraction where he used four. Our analysis of 2,000 scripts showed that level of abstraction is a highly significant index of development from ages 11 to 18, but that comparatively few students reach the theorizing level and that curriculum subjects vary widely in the rate at which they take students up the scale. The most disappointing finding was the very small percentage of expressive writing at any level—6 percent overall; and this, of course, would cover expressive writing in both the spectator and participant roles.

Writing in the Role of Spectator

We have suggested that as spectators we take up "a detached evaluative" role with regard to experiences real or imagined; we contemplate narrated experiences, recalled or imagined by ourselves or other people. A word of precaution must be added: we may reconstruct past experiences as a way of *getting something done*, as part of a larger transaction—in other words, for some end outside the utterance. In such cases we are in the participant, not the spectator, role. A witness in a court of law verbally reconstructs past events not in order to contemplate and evaluate them as an instance of what life can be like, but as a contribution towards the court's verdict. If a witness began to savor his or her story and work it up for the enjoyment of the jury, it would soon become clear that the witness was in the wrong mode. Telling a "hard luck story" is a device for securing attention by appearing to invite the listener into the spectator role; but when the demand for a loan comes, the listener knows that he or she was in the wrong role, that the speaker wants cash, not the sanctioning of values!

There is an important implication here: when we move into the spectator role, our utterance itself moves into the focus of attention, becoming an end rather than a means to something outside itself. As such an utterance moves up the scales from expressive to poetic, there is increasing stress upon the forms of the language itself and upon the formal disposition of whatever the language portrays—the

pattern of events in a story, the pattern of feelings aroused, the movement of thought in a philosophical narrative such as Wordsworth's *The Prelude*. At the poetic end of the scale, then, a piece of writing is a verbal object, an artifact in words, a work of art: its organization is not on the principle of efficiency as a means, but on the coherence and unity achieved when every part is appropriate to each other and to the whole design. Like any other work of art, a poetic utterance arises from an inner need, and the need is satisfied in the saying. The evaluative function is fulfilled for the writer in the act of presenting *an experience of order* and for the reader in sharing that experience and its ordering effect.

Contextualization

We suggest that there are differences between the way a reader apprehends a transactional utterance and makes it his or her own and the way a reader apprehends a poetic utterance. It is in our view a part of the conventions of transactional writing that a reader contextualizes an utterance in *piecemeal* fashion. Some parts of the discourse readers may ignore because they are too familiar; others they may reject because they judge them, for a variety of reasons, to be unacceptable; others they may reject because they cannot interpret them. Among and around those fragments readers accept, they will build their own connections, articulating the new information with what was already familiar to them. It is within these conventions, for example, that this chapter is intended to be read. But readers of a poetic utterance must resist the process of piecemeal contextualization: their intention is to recreate a verbal object, a piece of discourse that achieves, by internal organization, a single identity marked off from the rest of the world. They can never wholly succeed, of course, since the medium is discourse, discourse is referential, and the responses demanded of readers are deeply embedded in the everyday referential uses of language. The conventions governing poetic discourse are a force operating in a direction contrary to this. Putting it simply, we contextualize facts about social conditions in the nineteenth century as we read *Hard Times*, but we are at the same time aware that such responses are over and above the response we are primarily concerned to make, a response to the work *as a whole* and one which therefore calls for suspended judgment until the shape of the whole has been reconstructed in the reading. Similarly, we know that a novel with a "message" is in danger of being misinterpreted if we locate its message in some detail of plot or characterization: it speaks through the poetic construct as a whole.

The conventions of poetic discourse thus call for global contextualization.

When Susanne Langer (1942) first makes her distinction between discursive and presentational symbolism, she contrasts the linear nature of discourse with the simultaneous impact of a visual art form. The idea of a simultaneous communication is suggested in the name she has chosen, *presentational*. Yet the presentational forms of music and the verbal arts have a time dimension, as do discursive forms. Our distinction between piecemeal and global contextualization seems to be one way of resolving this difficulty and is consistent with the advice critics have sometimes offered on how literature—poetry in particular—should be read if we are to preserve its essential unity. Coleridge distinguished a poem from ordinary discourse by calling it "esemplastic" ("molding into one"), and Bateson (1966) stressed the necessity of attention to details of a text *after* a sense of the general meaning of the whole has been established. An interesting field for research offers itself in studying the relationship between "text" and "message" (see, as one starting point, Polanyi, 1958, p. 92) as it varies over types of discourse and, in particular, as between transactional and poetic varieties.

Contextualization and the Composing Processes

Pursuing the contexualization distinction, we may relate it directly to the processes of composition. The writer of a transactional piece, in having in mind the reader addressed, must try to envisage the initial preoccupations with which that reader will approach the task, since these preoccupations provide the context into which the text is to be fitted. Fitting the text to the preoccupations involves finding a way of beginning that will both open up the topic and enmesh with what the reader has in mind. Shared context builds up between writer and reader as the piece proceeds, so the chances of losing, confusing, misleading, or frustrating a reader are at their greatest in the opening sentences. "Finding a way in" has often been used as a way of talking about the difficulties of writing a transactional piece. It is more, of course, than simply wooing a reader or catching his or her interest: the strategy must be such that the writer-reader interaction sets up a coherent movement towards the heart of the message. How this may vary was something we observed at a simple level in reading the transactional writing produced in school; writers were likely to succeed if they found for their opening a generalization powerful enough to require more than a sentence or two to work out its implications. (Planning in advance is no guarantee of success, for an

outline does not necessarily promote the coherence that arises in the texture of the writing—and, indeed, may often militate against it.)

A glance at the opening words of a few poems, stories, or plays is enough to indicate that some quite different principle is at work in poetic discourse. There is no attempt to open by enmeshing with the reader's preoccupations but rather the reverse: an effort to create a dislocation. In Langer's words (1953), "Nothing can be built up unless the very first words of the poem effect the break with the reader's actual environment" (p. 214). The mature writer may make the break in a sophisticated way: *War and Peace* opens with *"Eh bien, mon prince,* so Genoa and Lucca are now no more than private estates of the Bonaparte family," and a poem by Kingsley Amis begins, "So, bored with dragons, he lay down to sleep." But even the three year old has a formula for doing it: "Once upon a time." We must not imply that to write the opening words of a story or a poem is a simple matter or one of random selection. What we suggest is that in poetic discourse the writer does not buttonhole readers by attempting to latch on to ideas already preoccupying them, that the writer does not need to "look for a way in." Rather, the writer woos readers by offering them "time out," a holiday from what daily concerns them, with the opening acting as a signal to switch from participant to spectator role. Having said that, it is clear to us that the constraints governing a poetic writer's choice of opening are precisely those that operate at all other points in his or her composition, the rules that produce the internal organization that gives coherence and unity to the artifact.

I should add at this point that while the whole question of piecemeal and global contextualization was most actively under discussion in the research team, we were fortunate enough to have Wayne Booth, author of *The Rhetoric of Fiction,* as a temporary associate, and we owe a great deal to his cooperation. This fact encourages us to believe that there is no fundamental disparity between the views regarding a literary author's relationship to his or her reader as we have set them out here and as Booth describes them in his book. There is, of course, a great deal of speculation in this part of our theory, and the whole area bristles with further problems. There is certainly a need for studies that attempt to connect composing processes with reading processes in systematic ways. A text composed by a writer and "reconstituted" by a reader would provide a useful unit of study; our hypotheses would lie in the area of the assumed differences between transactional text and poetic text. Recent approaches to the theory of reading would suggest that one payoff of such studies might be practical help to teachers of begin-

ning reading. (One recent conference on reading produced pretty general agreement with the claim that "the processes of language reception must somehow borrow the machinery of production.")

Preparation, Incubation, and Articulation

Our study of the processes of writing led us to consider three stages: preparation, incubation, and articulation. While it is clear that incubation plays an important and little-understood role in writing of all kinds, we might speculate that in much poetic writing incubation does duty also for the earlier stage, preparation. Certainly, autobiographical anecdotes that support this idea are in good supply, particularly, it seems, from English poets in the Romantic tradition. This example comes from Siegfried Sassoon (1945):

> One evening in the middle of April I had an experience which seems worth describing for those who are interested in the methods of poetic production. It was a sultry spring night. I was feeling dull minded and depressed, for no assignable reason. After sitting lethargically in the ground floor room for about three hours after dinner, I came to the conclusion that there was nothing for it but to take my useless brain to bed. On my way from the arm-chair to the door I stood by the writing table. A few words had floated into my head as though from nowhere. . . . I picked up a pencil and wrote the words on a sheet of notepaper. Without sitting down, I added a second line. It was as if I were remembering rather than thinking. In this mindless, recollecting manner I wrote down my poem in a few minutes. When it was finished I read it through, with no sense of elation, merely wondering how I had come to be writing a poem when feeling so stupid. I then went heavily upstairs and fell asleep without thinking about it again. . . . The poem was *Everyone Sang*, which has since become a stock anthology piece. (p. 140)

That thinking and utterance may undergo organizing processes at an involuntary level has been demonstrated often enough. This has been shown to be equally true in the production of transactional and poetic utterances. Bernard Kaplan (see also McKeller, 1957), for example, has described the occurrence of hypnogogic images that represent solutions or partial solutions to intellectual problems.[1] It seems surprising that the role of incubation in the writing process has not been experimentally investigated, as far as we know, in recent years. Articulation, the pen-to-paper phase of the writing

1. Lecture presented at a conference on "Symbolization and the Young Child," Wheelock College, Boston, October 1975.

process, is likewise an area ripe for experimental study. The only attempt to time the process accurately (Van Bruggen, 1946) seems to have been a limited experiment carried out in America many years ago, long before Goldman-Eisler's fruitful studies (1968) of the timing of speech.

The London Writing Research Unit in 1969 developed the design of a transmitting pen which, in conjunction with an electronic recording table, would give a timed record of an individual's performance throughout all the moves of drafting, amending, or redrafting; but shortage of both time and money forced us to abandon the proposal. We continue to cherish our hunch that "shaping at the point of utterance" may be a crucial aspect of the writing process in a great many kinds of writing. We are encouraged in this notion by Polanyi's (1969, pp. 144–146) concept of "focal" and "peripheral" awareness—peripheral awareness of the means, language, being subject to the control of a focal awareness of the end in view, the purposes for which the language is being used. We are encouraged also by our own experiments at writing without being able to read what is written: while in general this proved inhibiting, the degree of interference varied according to function—expressive (a letter to a colleague), transactional (a paragraph in a research paper), or poetic (a poem). The results were consistent with the belief that we focus upon the end in view, shaping the utterance as we write; and when the seam is "played out" or we are interrupted, we get started again by reading what we have written, running along the tracks we have laid down. With the loose structure of expressive writing, a dislocation (due to inability to read what we had written) might barely be noticed; with the transactional paragraph, the frustration lay principally in not being able to read back over the last few phrases. (Had we attempted to write a longer passage, other needs would of course have arisen.) With the poetic there was no predicting when the frustration would arise—the need to have the whole in view made itself felt, and the task was virtually impossible.

A more prosaic way of referring to "shaping at the point of utterance" is perhaps to say that a writer develops an inner voice capable of dictating to him or her in the forms of the written language. Yet that is mysterious enough, and there seems to have been no study of how the facility is acquired or how it is related to fluency and other speech factors or to tastes and habits in reading. I have already referred to the fact that we came across cases of children who reach the age of eleven *without* acquiring the ability,

whose inner voice is restricted to the dialogue that has assailed their ears.

A final speculation on the articulation process will serve as a link with the general statement that concludes this chapter. We have hinted at the organizing power of a generalization in a piece of transactional writing. A complementary process in poetic writing may lie in the power of a formal feature or features to act as organizing principles. We believe, in fact, that children's writing sometimes demonstrates the "taking over" process in the course of a single utterance. A piece that begins in a loose, unstructured way—perfunctorily, even—may seem to take shape under the influence of the affective power of a rhythm or sound pattern, an image or an idea. It has been remarked that in young children's drawings what has been called physiognomic perception—a dynamic way of perceiving that responds to global expressiveness rather than to detail—may sometimes take over and affect both the objects the child chooses to represent and the mode of representing them. Perhaps there is a parallel here to what we believe we have observed. In this first piece, in many ways typical of the cataloging small children go in for (the writer is a seven-year-old girl), a rhythm seems to take over and exercise a degree of control over what is written:

> Class I had Monday off and Tuesday off and all the other classes had Monday and Tuesday off and we played hide-and-seek and my big sister hid her eyes and counted up to ten and me and my brother had to hide and I went behind the dust-bin and I was thinking about the summer and the buttercups and daisies all those things and fresh grass and violets and roses and lavender and the twinkling sea and the star in the night and the black sky and the moon.

The take-over effect is more powerful in the next example, though it is also more difficult to identify the particular formal feature or features that acted as vehicles for the feeling that drew the piece together. The story was dictated to his teacher by a grade one boy in a Toronto school. We know that, at the time, his father had recently deserted the home.

> Once upon a time there was a little boy, and he didn't have a mother or father. One day he was walking in the forest. He saw a rabbit. It led him to a house.
>
> There was a book inside of the house. He looked at the book and saw a picture of a pretty animal. It was called a "horse."
>
> He turned the page and saw a picture of a rabbit, a rabbit just like he had seen in the forest. He turned the page again and saw a cat. He thought of his father and mother, and when he was small,

and they had books for him and animals for him to play with. He thought about this and started to cry.

While he was crying a lady said, "What's the matter, boy?"

He slowly looked round and saw his mother. He said, "Is it really you?"

"Yes, my son. I'm your mother."

"Mother, mother . . . are you alive?"

"No, child. This is the house that I was killed in."

"Oh, mother . . . why are you here?"

"Because I came back to look for you."

"Why, mother? Why did you come back to look for me?"

"Because I miss you."

"Where is father?"

"He is in the coffin that he was buried in. But don't talk about that now. How are you son? You're bigger . . . and I'm glad to see you."

"It's been a long time, mother."

While the boy and the mother were talking, his father came into the room and said, "Hi, son. How are you?"

"Fine," said the boy, "fine."

Suddenly the mother and father came to life.

The boy was crying, and the mother and father were crying too. God suddenly gave them a miracle . . . to come to life. The boy looked at the mother and father and said, "Oh, mother, oh, father."

Two Sets of Rules of Use

Susanne Langer's distinction between discursive and presentational symbolism is the foundation stone for her speculations concerning the two modes of organization by which our primary mental operations achieve fullest significance and power. The first is the cognitive order, a superstructure made possible by the invention and use of discursive language. It is the order of objective knowledge; in the course of reaching it, one has to dissociate the cognitive from the affective aspects of one's experience of the world. The uniquely personal responses, the affective aspects, are screened out (as far as they may be) in order to achieve knowledge and control of the environment. Langer claims that we have known and recognized this order and studied its laws so exclusively that we have failed to distinguish the other order from mere chaos. The order associated with presentational symbolism is perfectly represented in a work of art: it is not an organization of *affective* responses, for by the laws of this order the cognitive-affective distinction is irrelevant. A work of art is a projection of our cognitive-cum-affective responses to experience. It is a subjective order, and as such it comes into operation, in a

form less intense, less perfect than it achieves in a work of art, in many of our daily activities. Langer's recent volumes (1967, 1973) continue her pioneer work in attempting to describe the principles of her alternative order, the principles by which experience is projected into a work of art. She speculates (1964, p. 61) among other things that "physiognomic perception" may play its part and that the representation of tensions and resolutions may relate the structure of a work of art to the phases characteristic of every "living act," the shape of the elements that make up the continuum of life.

In our proposal to divide discourse into language in the role of participant and language in the role of spectator, we see the two spectra as embodying Langer's two forms of organization. Difficult though it may be for linguists to see the validity of this "first cut" in kinds of discourse, we believe Langer's distinction must in the long run find acceptance. In terms of linguistic competence, then, we see expressive discourse as an area of discourse where the rules of use are at their least demanding. As writers improve in their ability to meet the demands, on the one hand, of participant tasks and, on the other, of tasks in the spectator role, they will internalize two distinct sets of rules of use: from the matrix of expressive writing, they will acquire competence in both transactional and poetic modes of writing. We believe speech-act analysis would improve its explanatory power if it applied its rules differentially and/or applied different rules to the two spectra we have described.

Postscript

Let me say again that the ideas I have explored here have often been highly speculative and may best be regarded as indications of areas where further inquiry is needed. Work on the process we have called *incubation*, for example, is probably still mainly at the case-study level, but I see no reason why experimental situations should not be set up to yield more controlled data. In an intricate and puzzling area of psychological study, one would at least have *texts* to hang on to. Some early experiments on recall (Bartlett, 1932/1964), where time interval was related to stages of modification of the material recalled, might be adapted to serve this somewhat different purpose.

As for the articulation process, I hope people who feel as we do that "shaping at the point of utterance" is an apt description of an actual process may find it worthwhile to investigate the mysteries of the "inner voice" that comes to dictate written forms of discourse, a study that would have to relate to a subject's reading patterns over a

period of time, as well as to the subject's drafting procedures. All methods of drafting seem to me to deserve more investigation than they have so far received. Simple interference techniques, such as the one we tried where the writer cannot see what he or she writes and systematically varied interruptions during composing, seem worth further trial. Perhaps the most obvious lack is that of an accurate matching of a fully revised and edited piece of writing with a complete time record of its production. Electronic apparatus would make this matching possible today, and it is high time somebody undertook it. Long-term studies of the development of writing ability are almost as scarce today as they were when I. A. Richards first pointed out their importance some forty years ago. Finally, anyone who has the time and energy to make a full study of Susanne Langer's recent works ought then to fall in behind her in an attempt to define those laws we have glibly referred to as the rules of use governing utterances that are also works of art.

3 Paradigms and Problems: Needed Research in Rhetorical Invention

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> The process of examining any topic is both an exploration of the topic, and an exegesis of our fundamental beliefs in the light of which we approach it; a dialectical combination of exploration and exegesis.
>
> Michael Polanyi

On what basis can one argue that, at this moment, we need certain kinds of research in rhetorical invention and that we are less in need of other kinds? I would like to move toward an answer by first proposing that since the beginning of the century, the teaching and researching of composition have been guided by what Thomas Kuhn (1970) has called a "paradigm,"[1] a system of widely shared values, beliefs, and methods that determines the nature and conduct of the discipline. A paradigm determines, among other things, what is included in the discipline and what is excluded from it, what is taught and not taught, what problems are regarded as important and unimportant, and, by implication, what research is regarded as valuable in developing the discipline. It is what accounts "for the relative fulness of . . . [our] professional communication and the

1. The term is taken from Kuhn's *Structure of Scientific Revolutions*. Although "paradigm" has several meanings in Kuhn's work, I am treating it as synonymous with what he calls a "disciplinary matrix"—"'disciplinary' because it refers to the common possession of the practitioners of a particular discipline; 'matrix' because it is composed of ordered elements of various sorts, each requiring further specification" (p. 182).

Kuhn's work is an effort to account for deep and rapid changes in the sciences; hence, there is some question whether it is legitimate to apply it to other disciplines. However, the similarities between scientific disciplines and other disciplines, including our own, are substantial enough to make its use here at least tenable. Gage (1964, pp. 22–31) puts Kuhn's work to a similar, and valuable, use; he argues that the discipline as a whole is in a "preparadigmatic" stage, a judgment that seems to me reasonable. However, if one examines only the discipline of composition (a subdiscipline for Gage), one finds a more orderly, coherent, and directed enterprise.

relative unanimity of . . . [our] professional judgments" (Kuhn, 1970, p. 182). For those working within a discipline, a paradigm is an eye to see with.

It is not difficult to find evidence for the contrary position that there has been no generally shared system of beliefs which has guided work in the discipline. One need only recall the extraordinary variety of courses Kitzhaber (1963) discovered in his survey of freshman composition programs to wonder whether we have any discipline at all. However, I think a reasonable case can be made for the proposition that for several decades members of the discipline have shared a remarkably stable system of beliefs, a system that Daniel Fogarty (1959) has called "current-traditional rhetoric" (p. 118). If we accept the proposition, the varied courses can be seen, for the most part, as variant manifestations of an underlying paradigm.

Not all of those teaching composition and conducting research on it have been committed to current-traditional rhetoric. And some of those who have at one time been believers have stepped outside it, espousing new theories. The reception accorded new theories is one indication of whether the discipline is in fact controlled by a paradigm. In his *Biographia Literaria* Coleridge notes the existence of "a sort of secret and tacit compact among the learned, not to pass beyond a certain limit in speculative science. The privilege of free thought . . . has at no time been held valid in actual practice, except within this limit; and not a single stride beyond it has ever been ventured without bringing obloquy to the transgressor" (pp. 95–96). Not the criticisms, but the violence of the criticisms of Robert Zoellner's application of behavioral theory to the composing process (1969a) suggests that he had passed beyond some very real limits in the minds of the learned in the discipline, that he had stepped outside a paradigm. (See "On Zoellnerism," 1969, for responses to Zoellner's approach.) Indeed, in a response to his critics, Zoellner (1969b) makes it clear that he regards the conflict as paradigmatic.

If we assume that such a paradigm does exist and if we examine it through the lens of Kuhn's theory, then some recent developments in rhetoric take on a special meaning, one which has strong implications for the conduct of research.

I. The Current-Traditional Paradigm

The main difficulty in discussing the current-traditional paradigm, or even in recognizing its existence, is that so much of our theoretical

knowledge about it is tacit. Such is the case with the vitalist assumptions, inherited from the Romantics, that underlie so many of its overt features.[2] The overt features, however, are obvious enough: the emphasis on the composed product rather than the composing process; the analysis of discourse into words, sentences, and paragraphs; the classification of discourse into description, narration, exposition, and argument; the strong concern with usage (syntax, spelling, punctuation) and with style (economy, clarity, emphasis); the preoccupation with the informal essay and the research paper; and so on. Vitalism, with its stress on the natural powers of the mind and the uniqueness of the creative act, leads to a repudiation of the possibility of teaching the composing process, hence the tendency of current-traditional rhetoric to become a critical study of the products of composing and an art of editing. Vitalist assumptions become most apparent when we consider what is excluded from the present discipline that had earlier been included, the most obvious and significant exclusion being the art of invention.

The overt features of the paradigm have provided the content and organizational principles for hundreds of anthologies and composition texts for three generations. The frequently heard complaint that composition texts are too much alike is, I think, unwarranted; the striking similarity is more a symptom of a widely shared paradigm than lack of imagination. Composition texts are more properly judged on their clarity and pedagogical ingenuity than on their conceptual originality. Textbooks elaborate and perpetuate established paradigms; they are one of the principal vehicles for the conduct of a discipline in a stable state. As such, they are a particularly valuable source of information about the paradigm.

Even a cursory survey of bibliographies such as the one in Braddock, Lloyd-Jones, and Schoer's *Research in Written Composition* (pp. 118–142) reveals that our research, on the whole, has reflected distinctive features of this paradigm; for example, a strikingly large proportion of it has been devoted to the sentence, the paragraph, usage, and style. The *aim* of the research is also typical of a firmly established paradigm. Researchers have been primarily concerned with problems of application, most notably with pedagogical practice, rather than with problems of theory (support for this generalization can be found in Braddock et al., 1963, and Rowland, Van Gelder, & McKiernan, 1966). Purely theoretical problems are seldom of much

2. The assumptions are explored in detail by Weidner (1975); Kantor (1975) traces some influences of vitalist assumptions in current-traditional rhetoric during this century.

interest as long as the principal features of the paradigm are unchallenged. During stable periods, theoretical assumptions tend to function as presuppositions rather than as subjects for investigation. When one believes, he (or she) does not question his beliefs; he *uses* them. It is quite possible to teach and even carry out pedagogical research informed by the paradigm with only a general notion of what the basic assumptions of the discipline are. Current-traditional rhetoric has dominated the discipline so thoroughly and for so long that it is probably more accurate to speak of a rhetorical tradition rather than a theory, if by theory we mean an explicit system of assumptions.

One important characteristic of current-traditional rhetoric is the exclusion of invention as a subdiscipline of the art.[3] Proponents of current-traditional rhetoric have offered two arguments for this exclusion. First, rhetoric is the art of presenting ideas; other disciplines, they argue, are more properly concerned with original inquiry and the development of new knowledge. For example, Martin Steinmann (1966) argues that "rhetoric . . . is concerned with the effective choice of synonymous expressions" (p. 280). This definition, he continues (p. 281), "excludes both invention (choosing between non-synonymous expressions) and memory from the province of rhetoric—retaining arrangement, expression, and delivery. . . ."[4] Second, they argue from the vitalist assumption that creative processes, which include the composing process, are not susceptible to conscious control by formal procedures. As Taylor Stoehr (1967) remarks, "In all of this process the writer is, in a sense, at the mercy of his thoughts. He does not direct them at this or that point; instead, he follows them with more thoughts, spontaneously, naturally. It is hard to say whether he has the thoughts, or they have him" (pp. 420–421). Skills which cannot be formulated as methods cannot be taught (though they can be learned) and hence have no place in an art of rhetoric.[5]

3. "Invention" here refers not only to classical invention (which provides formal procedures for determining the status of an argument, discovering possible ways of developing it, and adapting it to specific audiences), but also to other formal methods designed to aid in retrieving information, forming concepts, analyzing complex events, and solving certain kinds of problems. The most significant of these methods are discussed in section III of this chapter.

4. Cf. Steinmann's comments with this by A. S. Hill (1895), one of the progenitors of current-traditional rhetoric: "It [rhetoric] does not undertake to furnish a person with something to say; but it does undertake to tell him how best to say that with which he has provided himself" (p. vi).

5. Cf. John Genung's comments in *The Practical Elements of Rhetoric*, one of the most influential of the current-traditional texts: "Some elements of rhetoric, though real

No one seems to doubt that the skills invention is designed to cultivate are essential to effective composing. The question has been how they are to be cultivated. The answer provided by the current-traditional paradigm—i.e., reliance on other disciplines for their cultivation and on frequent writing followed by careful criticism—has not been notably successful, and teachers of composition have proposed various ways of stimulating and guiding the thinking of their students. As is to be expected, the proposals reflect a distrust of formal arts of invention.[6] They are efforts to meet the needs addressed by formal arts but without explicit, systematic procedures. For example, students are given lists of subjects which can be easily elaborated by "looking up" references. Or they are asked to write from immediate experience. Or they are asked to read provocative selections from any of the hundreds of anthologies of essays and fictional works designed for composition classes and then apply what they learn to their own lives. Variations on these methods (such as the look-think-write method with its collections of striking photographs) are among the most common subjects in our professional literature (for illustrations, see the section entitled "The Literary Approach to Composition" in Tate and Corbett's *Teaching Freshman Composition*, pp. 71–98).

II. Crisis

During the last fifteen years, the current-traditional paradigm has been repeatedly attacked for its failure to provide effective instruction in what is often called the "prewriting stage" of the composing process and in the analytical and synthetic skills necessary for good thinking. For example, D. Gordon Rohman (1965) argues that

> without the rhetoric of the mind . . . no course in the rhetoric of the word could make up for the fact that the writer has discovered essentially nothing to say. In fact, to continue to teach rhetoric without attention to discovery reinforces that indifference to meaning that characterizes the modern world of politics and advertising. (p. 112)

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and valuable, are not practical because the ability to employ them cannot be imparted by teaching. They have to exist in the writer himself, in the peculiar, individual bent of his nature" (p. xi); and "all the work of origination must be left to the writer himself" (p. 8).

6. Kuhn (1970) notes a somewhat analogous reaction to instabilities in scientific paradigms: proponents of the paradigm "will devise numerous articulations and *ad hoc* modifications of their theory in order to eliminate any apparent conflict" (p. 78).

And in comments at the Dartmouth Conference, Wayne Booth deplored "the prevailing tendency to minimize the need for systematic knowledge, the value of techniques of analysis, the pleasures and excitements of 'cognition,' or in general the importance of thinking" (in Muller, 1967, p. 106). His recent *Modern Dogma and the Rhetoric of Assent* can be read as an elaboration of the earlier statement; in it he argues for a conception of rhetoric as an art of discovering and developing warrantable beliefs. The point I want to make is that there is a growing belief that an important educational, and social, need is not being met by the profession, that we are confronted with a fundamental educational problem for which current-traditional rhetoric offers no solution.

The failure to develop effective means for cultivating the skills of invention is due neither to a lack of awareness of the problem nor to incompetence on the part of composition teachers. It is due, I believe, to efforts to respond to the problem in terms of the current-traditional paradigm. In terms of this paradigm, the problem has not appeared so important as other problems, such as lack of fluency and inability to meet standards of usage. What we do in the classroom is a fair measure of our priorities, and the skills invention is designed to cultivate have clearly had a low priority. For example, in her study of the composing processes of twelfth graders, Janet Emig (1971) notes that "in school-sponsored writing, there is often no time provided for . . . [the prewriting] portion of the writing process" (p. 92). (For an extension of this study, which reaches similar conclusions, see Mischel, 1974.) Those current-traditionalists who *have* acknowledged the need as significant have tended to assume that it could be solved in ways consistent with the paradigm, i.e., by informal means of the sort mentioned earlier. Neither the tendency to regard the problem as relatively unimportant nor the assumption that it can be dealt with by informal means is surprising. We all see the world "through" our beliefs, and that is the way the problem looks to most current-traditionalists.[7] Training in a paradigm develops particular scholarly and pedagogical capacities, but it also develops particular incapacities. As Kenneth Burke (1954) remarked, "A way of seeing is also a way of not seeing" (p. 49).

7. Cf. Kuhn's remark (1970) that "a paradigm can . . . even insulate the community from those socially important problems that are not reducible to the puzzle form, because they cannot be stated in terms of the conceptual and instrumental tools the paradigm supplies" (p. 37).

III. The Response to Crisis

One way a discipline develops, Kuhn (1970, pp. 23–34) says, is by gradual elaborations, clarifications, and applications of the paradigm. We can find such changes in the current-traditional paradigm if we review our professional literature, though the changes have been disturbingly slow despite prodigious effort. But, Kuhn says, a discipline also develops in another way—through a process set in motion by an awareness of serious problems in the established paradigm. The stages in the process go something like this. A paradigm acquires wide support by demonstrating its superior ability to solve problems generally acknowledged by those in the discipline to be acute and fundamental; once it is established, research is directed primarily toward its articulation and application. New problems arise, however, which those committed to the paradigm cannot solve adequately, and a crisis develops, accompanied by a sense of uncertainty and insecurity in the profession. The response to the crisis is typically the development of new theories which are able to provide more adequate solutions. A new paradigm emerges from the inquiries and controversies of the crisis state and with it another period of relative stability (Kuhn, 1970, pp. 66–76).

I am suggesting that if we see the problem discussed as creating a crisis in our discipline and, in doing so, stimulating proposals for formal arts of invention, we can make a kind of sense out of the recent and rapidly growing interest in the composing process and the numerous proposals for controlling it. And we can also construct a rationale for a program of research.

During the last fifteen years, two extremely important changes have occurred in the discipline: composition is now being examined as a process, and four substantial theories of invention have emerged, partly at least in response to the problem we have been discussing—classical invention, Kenneth Burke's dramatistic method, D. Gordon Rohman's prewriting method, and Kenneth Pike's tagmemic invention. It is no accident that the shift in attention from composed product to the composing process is occurring at the same time as the reemergence of invention as a rhetorical discipline. Invention requires a process view of rhetoric; and if the composing process is to be taught, rather than left to the student to be learned, arts associated with the various stages of the process are necessary. The changes are important not only because they are responsive to a

long-standing need unmet by the current-traditional paradigm, but also because they are incompatible with some of the paradigm's basic features. They are challenges to the continuing viability of the paradigm.

Classical Invention

Classical rhetoric, the rhetoric of Aristotle, Cicero, and Quintilian, is the art of constructing persuasive arguments for popular audiences. It is composed of five arts—invention, arrangement, style, memory, and delivery. Invention, first in importance and the first art used in the composing process, is designed to help one discover valid or seemingly valid arguments. Invention usually begins with identifying the crucial issue to be argued (a question of fact, definition, quality, or procedure). This determines the thesis of the argument. Once the thesis is determined, the speaker or writer draws on the three available means of persuasion: ethos (an appeal based on the speaker or writer's own moral character), pathos (an appeal to the audience's emotions), and logos (an appeal based on logic). All three appeals may be used in a single discourse; how they are used and which are emphasized depends on what Lloyd Bitzer (1968) has called the "rhetorical situation," i.e., the audience, the problematic situation that elicits the discourse, and the constraints on speaker or writer and audience. Arguments in support of the thesis can be discovered systematically by the use of topics, or heuristic probes: arguments can be developed by definition, comparison, contrast, antecedents, consequents, contradictions, and so on. Guides for appeals to the emotions of the audience and appeals based on the character of the speaker are also provided by the method.

For several decades composition texts have been, on the whole, innocent of direct classical influence, although one can find echoes of the classical topics in paragraph patterns (e.g., generalization-comparison; generalization-contrast). The '60s, however, saw the appearance of several composition texts which contain substantial sections on classical invention (e.g., Hughes & Duhamel, 1962; Corbett, 1965; and Mackin, 1969). In one of the earliest of these, Richard Weaver (1967) justifies his discussion of invention as a response to social needs:

> Never before have so many pleas been made to the individual for an active citizenship. Active citizenship in the essential sense requires an understanding of the laws of evidence, the ability to criticize lines of argumentation, and some skill in making arguments in return . . . . Though the introduction of the "topics" into a textbook of freshman English is a fairly radical innovation, it is

> felt that these topics are justified by their proved value in helping students to assay the arguments of others and to find substance for arguments of their own. (pp. vii–viii)

Burke's Dramatistic Method

During this period, attempts were also made to adapt Burke's dramatistic method for use as an art of invention. The heart of the method is a pentad of heuristic probes—act, scene, agent, agency, and purpose—for analyzing human motives and motifs in human experience, which, broadly construed, include virtually everything we think and do. "Any complete statement about motives," Burke (1955) says, "will offer *some kind* of answers to these five questions: what was done (act), when or where it was done (scene), who did it (agent), how he did it (agency), and why (purpose)" (p. x). Burke has insisted that his rhetorical theory is an extension of classical rhetoric; but it should be clear that the dramatistic method does not serve the same function as classical invention, though the two methods are related. The classical topics are aids in discovering possible arguments; the pentad is an aid in discovering the essential features of the behavior of groups or individuals.

Burke's dramatistic analyses have centered on motivation in *language behavior*, for as he (1955) says, "Language being essentially human, we would view human relations in terms of the linguistic instrument" (p. 317). Two texts by W. Ross Winterowd (1965, 1975) make use of the pentad for discourse analysis; but the dramatistic method is also being brought to bear on nonlinguistic events, in which case it serves a function similar to the heuristic frequently used by journalists, the familiar Who? What? When? Where? How? and Why? (For example, William F. Irmscher's *The Holt Guide to English*.)

Rohman's Prewriting Method

The function of D. Gordon Rohman's prewriting method is to develop the creative potential of the writer in dealing with his or her own experience. "To what end do we teach writing?" Rohman (1965) asks:

> If it is to "program" students to produce "Letters and Reports for All Occasions," it is not only ignoble but impossible . . . . However, if it is to enlighten them concerning the powers of creative discovery within them, then it is both a liberal discipline and a possible writing program . . . . What we must do is place the principle of actualizing in the minds of students and the methods of imitating it in their hands. (p. 108)

The procedures he proposes for introducing students to the dynamics of creation, for helping them assimilate their subject to themselves, as Rohman (1965, p. 106) puts it, grow out of his interest in Thoreau and in theoretical and applied work on creativity and concept formation, particularly the work of Jerome Bruner (1965; also, Bruner, Goodnow, & Austin, 1965), William Gordon (1961), and Arthur Koestler (1964). The prewriting method requires that the student keep a journal, practice principles derived from religious meditation, and employ analogy as the primary instrument for probing experience.

Rohman's influence is apparent in several recent texts. For example, Donald Stewart argues in his *Authentic Voice* that

> the fault of present-day teaching methods is that they teach students how to *judge* their finished work but not how to *produce* it. This implies a fundamental shift in attention from the *product* of writing toward the *process* by which the product eventually gets on paper. This text . . . proceeds from the conviction that the primary goal of any writing course is self-discovery for the student and that the most visible indication of that self-discovery is the appearance, in the student's writing, of an authentic voice. It proceeds from a second conviction that the techniques of prewriting, developed in the 1960's, will best help the student develop his authentic voice. (pp. xi–xii)

Pike's Tagmemic Invention

The last of these recently proposed arts of invention is derived from tagmemics, a linguistic theory developed by Kenneth Pike. Since composing is but a specialized use of language, Pike argues, a theory about language behavior in general should also be applicable to composing behavior. In 1964 Pike asked if it would be possible "to explore a number of the axioms of such a language theory [i.e., tagmemics], in order to develop exercises based on these axioms about language structure but specifically designed to develop writing competence" (p. 82) and then went on to suggest the groundwork for a new art of invention. As presently conceived, the art is composed of a series of heuristic procedures designed to aid the process of inquiry; it provides procedures for analyzing and formulating problems, for exploring problematic data in search of solutions, and for testing solutions. It also provides an epistemology and techniques for discovering prerequisites for inducing psychological change in the audience (Young, Becker, & Pike, 1970).

The art is designed to help the writer carry out three activities when confronted with problematic experiences: retrieval of relevant

information already known, analysis of problematic data, and discovery of new concepts and ordering principles. By way of contrast, classical invention is concerned with finding arguments likely to induce psychological changes in the audience; prewriting, on the other hand, is concerned with the discovery of ordering principles and with changes in the writer. Tagmemic invention is concerned with both. It conceives of invention as essentially a problem-solving activity, the problems being of two sorts: those arising in one's own experience of the world and those arising out of a need to change others.

IV. Needed Research

I have been arguing that, if examined through the lens of Kuhn's theory, our discipline appears to be in a crisis state. The significance of this for us is that a crisis state calls for research quite different from that carried on during periods dominated by a single, stable paradigm. Research carried on under the influence of the current-traditional paradigm has been, for the most part, directed toward elaborating and applying the paradigm. Research appropriate to the present situation, however, must be directed toward determining the adequacy of the present paradigm and the proposed alternatives.

The existence of a persistent problem in the current-traditional paradigm does not in itself provide a basis for repudiating it. For no matter how dissatisfied teachers and scholars have been with current-traditional rhetoric—and the dissatisfaction has been substantial—they will not renounce the paradigm that has led them into crisis unless there is an acceptable alternative to take its place. To do so would be to withdraw from the discipline. "The decision to reject one paradigm," says Kuhn (1970), "is always simultaneously the decision to accept another, and the judgment leading to that decision involves the comparison of both paradigms [i.e., the established paradigm and the theory proposed as an alternative] with nature *and* with each other" (p. 77). With the emergence of competing theories comes the necessity to judge and to decide.

Research on Competing Theories

The research needed at the moment is research that helps us make reasonable judgments about the adequacy of the theories of invention we have been discussing. Two general questions need to be asked of each:

1. Does it do what it claims to do? That is, does it provide an adequate account of the psychological processes it purports to explain? And does it increase our ability to carry out these processes more efficiently or effectively?

If the answer is negative, we must decide whether to drop the theory from further consideration; the decision, however, must be made cautiously since the answer may result from causes other than defects in the theory.

2. Does the theory provide a *more adequate* account of the processes and *more adequate* means for carrying them out than any of the alternatives?

Again, assuming that the research is reliable, a negative answer would make it difficult to continue regarding the theory seriously. It is worth noting that comparative studies presuppose that the theories and procedures associated with them have similar functions; yet none of the theories have identical functions, although they have significant shared features. Any comparative studies would have to take account of such similarities and differences. We cannot reasonably expect a theory to do something it was not designed to do.

During the last few years several experimental studies have been conducted which seek to answer these questions. For example, two studies (Odell, 1970; Young & Koen, 1973), using pre- and post-testing procedures, have been conducted to determine the effectiveness of tagmemic invention (see also Odell, 1973, 1974). Both studies attempt to answer the first question. Although the results were positive in both cases, flaws are apparent in the research designs, an illustration of the need for sequences of research studies which enable investigators to design increasingly refined testing procedures. Testing the contribution of methods of invention to the acquisition of complex cognitive skills is exceedingly difficult to do well. Reliable tests can be developed only by careful analysis of the results of increasingly intelligent mistakes.

The generalizations about testing apply as well to research on the prewriting method. D. Gordon Rohman and Albert Wlecke's *Prewriting: The Construction and Application of Models for Concept Formation in Writing* presents a theory of the psycholinguistic processes involved in creating new concepts, as well as principles of order in one's own experience, and a procedure for stimulating these processes. It also tests the effectiveness of this procedure in comparison with a more traditional approach to composition. A subsequent study by Clinton Burhans, Jr., (1968) compares three methods in order to determine

their relative effectiveness: (1) Rohman's version of the prewriting procedure, coupled with a text on editing; (2) Burhans's version of the prewriting procedure, supplemented by instruction in organization and editing; and (3) a current-traditional approach offering no instruction in invention whatsoever. The Rohman-Wlecke study is an effort to determine whether the prewriting method does what it purports to do and whether it does it better than a version of the current-traditional rhetoric. That is, it attempts to answer both our questions. The Burhans study has the same objectives, but seeks, in addition, to determine the relative effectiveness of two versions of the prewriting method. I cite the experimental studies on tagmemics and prewriting partly because they illustrate *one* kind of research needed at the moment and partly because they illustrate the need for replication and improvement of research already done.

But the research needed at the moment is not limited to experimental studies. Philosophical responses to the first question are apparent in articles by William F. Nelson and Pike. Nelson's "Topoi: Evidence of Human Conceptual Behavior" is an effort to determine whether the topics of classical invention are merely useful in creating certain kinds of arguments or are essential to all conceptual behavior. Although he argues that the latter is the case, compelling counterarguments exist (see, for example, Benveniste, 1971). The issue remains open. Pike's "Science Fiction as a Test of Axioms Concerning Human Behavior" investigates a similar assumption—that the axioms of tagmemic invention present essential features of rationality itself. His speculations, though brief, suggest the difficulty of evaluating the basic assumptions of any theory; they also illustrate the ingenuity required by the task.

What has been said so far suggests several other projects that would increase our ability to make reasonable judgments about the competing theories. For example, bibliographical projects: What studies have been done that are responsive to the two questions? Analyses of the distinctive features of the theories would also be valuable: What are the basic assumptions of each theory? (They are not always explicit in the literature.) Are the assumptions reasonable? What are the specific functions of each theory? Are the design and content of each theory consistent with its function? (Protocols and case studies of writers using each of the methods would be helpful in studying the functions of each theory.) We need to learn how to discuss the competing theories as theories rather than as pedagogical tools.

Studies that contribute to the design of experimental projects are

also needed: What predictions can be inferred from the distinctive features of each theory? What shared features provide the basis for comparative projects? What are the limitations of the various kinds of experimental design? How can they be compensated for? What are the deficiencies of the studies already carried out? How could subsequent studies be designed to eliminate these deficiencies? What pilot projects could be designed to initiate a series of increasingly adequate projects? (For an illustration of a pilot project designed to test Zoellner's talk-write hypothesis mentioned earlier, see Radcliffe, 1972.)

Metarhetorical Research

Another kind of research needed at the moment is concerned not with the evaluation of the particular theories we have been discussing, but with criteria by which we determine the adequacy of *any* theory of invention. Steinmann (1966) has called this "metarhetorical research," the product of which is metatheories that "describe (or prescribe) the properties of adequate theories" (p. 281). A metatheory, Steinmann continues, "does such things as specifying what an adequate theory must explain (exercise of rhetorical ability) and what methods of discovery and verification it must use and explicating rhetorical concepts like purpose and context" (p. 281).

Janice Lauer's "Invention in Contemporary Rhetoric: Heuristic Procedures" (see especially pp. 142–157) and Winterowd's "'Topics' and Levels in the Composing Process" illustrate this kind of research. Both survey various procedures of invention and propose criteria for judging them: for example, whether the procedures require the writer to probe all the elements in the rhetorical situation, whether the procedures specify clearly the sequence of operations to be carried out, and whether the "topics" which comprise the procedures constitute an open or closed set, a closed set being judged more desirable.

Our conception of the composing process—more specifically, our conception of its scope—influences strongly our criteria for determining what is an adequate theory of invention. If, for example, we assume that the composing process begins after the identification of a thesis and ends with a finished discourse, as is often the case in current-traditional rhetoric, then invention (whether informal or formal) need only involve finding relevant things to say about the thesis. However, if the composing process begins with the perception of a social problem and ends with changes in an audience's beliefs and behaviors, that is, if it is carried out within a rhetorical situation,

then classical invention is required, or some other method with similar functions. But the scope of the process can be conceived to be even more extensive. Prewriting, for example, extends it to include what Bruner (in Rohman, 1965) calls the "act of discovery" in which evidence is transformed in such a way "that one is enabled to go beyond the evidence so assembled to new insights" (p. 107). Tagmemic invention extends the scope of the composing process to what appears to be the limit when it provides procedures for analyzing and formulating problems which give rise to inquiry (see, for example, Young, 1969). It seems clear that before the adequacy of competing theories can be determined, more general questions about the composing process itself must be resolved. Although they are important contributions to our knowledge of the composing process, descriptive studies, such as Emig's study (1971) of the composing processes of twelfth graders, will not in themselves provide us with standards for determining the adequacy of conceptions of the process. Such studies describe only what some writers did; they cannot be taken as normative.

Sociological and philosophic studies such as S. M. Halloran's "On the End of Rhetoric, Classical and Modern" and Richard McKeon's "Uses of Rhetoric in a Technological Age: Architectonic and Productive Arts" may help us understand better the kind of rhetoric needed today and at least some of the necessary characteristics of a modern art of invention. For example, Halloran argues that classical rhetoric no longer meets the needs of society:

> The assumptions about knowledge and the world that informed classical rhetoric are no longer tenable. External reality is paradoxical; our very effort to know something of the physical environment alters that which we seek to know so that the object-as-known is not the same as the object we set out to know. Our values seem arbitrary, contradictory, and ultimately groundless. The wisdom our culture has accumulated is arcane and available only in narrow portions governed by specialists who speak mysterious and intimidating languages. What those specialists know is so intricate that the ordinary citizen must simply accept their conclusions on faith. (p. 624)

Given this, he proposes a new focus for research on rhetoric:

> It is no longer valid to assume that speaker and audience live in the same world and to study the techniques by which the speaker moves his audience to act or think in a particular way. One must turn instead to the more fundamental problem of why the gap between the speaker's and audience's worlds is so broad and how one might bridge it successfully. (p. 625)

If Halloran's observations are sound, then Burke's dramatistic method and Pike's tagmemic invention would appear to be more responsive than classical invention to the needs of the day. However, it is not at all clear how one determines modern needs reliably or whether a single rhetorical theory can satisfy them all.

Specifying the criteria for adequate theories of invention would provide another means of judging the competing theories, for we could then compare theory with criteria as well as with nature. Yet it is unlikely that the few criteria that have been proposed so far are sufficient. Furthermore, there is no reason to believe that they are generally acceptable; and where there is disagreement about the criteria for judgment, there will be disagreement about the judgments themselves. Since discussions of the various theories in our professional literature often contain judgments based on unstated criteria, we need to ask what criteria are presently being brought to bear and whether they are sound, necessary, and sufficient.

The preceding discussion suggests some additional points of departure for research. Several questions can be asked about the composing process and theories of invention: What do we mean by the "composing process"? How is the definition to be justified? Where are we going to say it begins and ends? What are the implications of this for theories of invention? To what features of the process must a theory of invention respond? Is the process the same for all kinds of discourse and rhetorical purposes? (We often speak as if there were only one composing process.) Or are there different kinds of processes for which different theories of invention are appropriate and inappropriate? What is the distribution of processes of invention in the composing process? Need they or do they in practice come at the beginning of the process, as is assumed in classical invention and Rohman's prewriting method?[8] Or is the distribution more complex? (E.g., do acts of invention occur cyclically in conjunction with stylistic and organizational acts?) Invention is often characterized as the production of the content of discourse, but if we repudiate the form-content dichotomy, as many do, what is it that processes of invention produce? What are the similarities and dissimilarities between composing a poem and composing nonfictional discourse? (Careful comparisons of protocols would be necessary to move us beyond easy answers.) Why do many assume that effective

8. See, for example, Rohman's comment (1965) that "we divided the process [of writing] at the point where the 'writing idea' is ready for words and the page: everything before that we called 'Pre-writing,' everything after 'Writing' and 'Rewriting'" (p. 106). The five arts of classical rhetoric also suggest a linear progression from thought to word.

arts of invention cannot be developed for composing poetry while they assume that such arts can be developed for composing nonfiction? (I suspect that the explanation lies as much in the history of literary theory as in empirical studies of the processes themselves.)

There are also questions to be asked about the internal characteristics of theories of invention. For example, is a closed set of heuristic probes or topics necessarily preferable to an open one, as Winterowd (1973) claims? Is there a limit to the complexity of heuristic procedures if they are to be used effectively? If so, how can this be determined? (Miller, 1956, may offer a starting point.) Are there conceptual universals? How would one demonstrate it? Does it follow that such universals are the proper constituents of effective arts of invention?

Historical Research

Historical research can be an important supplement to the research we have been discussing. One reason for this is that studies of earlier theories can offer us contrasts to present theories, thus enabling us to perceive more clearly what present theories are not and, hence, what they are. Such comparative studies are always valuable, but they are especially valuable during periods of crisis when belief systems must be scrutinized with uncommon care. Douglas Ehninger (1968) argues that studies of past theories can serve four other functions as well. First, historical studies introduce a healthy relativism into the debate over the adequacy of proposed theories. The historical perspective tends to shift the center of debate away from the correctness of theories to questions about their relative effectiveness in carrying out various functions. Second, historical studies increase our understanding of how the social and educational needs of the day combine with conceptions of the composing process to determine the form and substance of rhetorics. Third, they increase our awareness of the difficulties and dangers involved in creating a new paradigm. A new paradigm redraws the boundaries of the discipline, adding to it and leaving out. The gains it brings come at a cost.

Finally, historical studies help us understand better the kind of disciplinary change we appear to be undergoing, for it has happened several times in the past. To cite only one instance, the theoretical and pedagogical controversies surrounding Ciceronian rhetoric in the Renaissance led to paradigmatic changes that have had profound implications for subsequent developments in invention as well as the other rhetorical arts. (For accounts of the paradigm, see Joseph, 1962,

and Howell, 1961; for accounts of the changes and their implications, see Howell, 1961 and 1975, pp. 141–162.) Revolutions in paradigms appear different to the historian than they do to the advocates of competing theories. When seen through the historian's eyes, revolutions are more likely to appear as stages in the growth of a discipline. Such a perspective suggests the possibility of a metarhetoric in which all theories of rhetoric, past and present, participate. It thus provides an invaluable supplement to metarhetorical research.

Rhetoric has had a rich history but relatively few historians; a great deal of historical research needs to be done or done better. I know of only one history devoted exclusively to the art of invention, a short monograph (Harrington, 1948) tracing the development of the art from ancient Greece to the beginning of the nineteenth century. If we are to understand what has been happening in invention, we must understand what happened. Studies of the influence on invention of logic, psychology, and the natural sciences since the Renaissance would be particularly valuable.

Curiously, our knowledge of what happened in rhetoric and rhetorical invention before the nineteenth century is much fuller than our knowledge of what has happened since, although critical changes have obviously occurred in the discipline during the last 200 years. We have no history of the current-traditional paradigm and the events leading to its development and dominance, though some valuable work has been done (e.g., Kantor, 1975, and Kitzhaber, 1953). We lack studies of the contributions of other disciplines (e.g., structural linguistics) to the elaboration of the current-traditional paradigm. We lack histories of the profession itself—for example, explanations of the decline of rhetoric as a significant discipline in the training of English teachers (for related studies, see Parker, 1967, and Applebee, 1974). Professional preparation and one's ability to contribute to the growth of the discipline are related; inadequate preparation is no doubt one reason for the slow growth and absence of intellectual excitement which characterize current-traditional rhetoric. And we lack detailed accounts of pedagogical devices associated with theories of invention, such as the commonplace book and the journal. (What is the function of each in the art which fostered it? Why has the one faded out and the other become so popular?)

More generally, we need studies of earlier rhetorical paradigms as paradigms, as *systems* composed of related beliefs, values, and methods: How are the components of earlier theories of invention related?

How are the theories related to the paradigms in which they are embedded? What were the social and educational functions of the paradigms? How were these related to their social context? What was lost and gained as a paradigm evolved or was replaced by another?

There is no algorithm, no systematic decision-making procedure, that can dictate the choice of one theory rather than another. Informed choice will depend upon informed debate, and this requires that we be clear about our criteria for judgment, that we agree on the meaning of our terms, that we have evidence to support claims about the adequacy of one or another of the theories—the process is familiar to us all. If we are to carry it out responsibly, much research needs to be done.

4 Some Implications of Cognitive-Developmental Psychology for Research in Composing

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In the long history of Western rhetoric, the eighteenth century stands as a watershed between what one might call the "philosophical" and the "psychological" approaches to human communication. It was the eighteenth-century British rhetoricians, influenced by the empiricist philosophers, who suggested that rhetoric should be based on a psychological analysis of the *mind* of the listener. Hence, as Douglas Ehninger (1968) has argued, eighteenth-century rhetoricians, particularly George Campbell, approached rhetoric "through an analysis of the mind of the listener-reader, premising their doctrine upon assumptions concerning the ways in which men come to know what they know, believe what they believe, and feel what they feel" (p. 135).

This shift to a psychological orientation was, on the whole, salutary. However, a particular psychological orientation emerged from eighteenth-century associationism and came to dominate both psychological and communication research in twentieth-century America. The psychology of behaviorism placed the focus of research on the response of organisms to environmental stimuli. In the field of communication, the twin forces of behaviorism and logical empiricism directed research to such phenomena as audience response, speaker reaction to feedback (defined in terms of physical response), and other observable behavior (see O'Keefe, 1975).

Although this psychological orientation still pervades much of communication research, its influence is waning. Our concern in this essay is with an alternative tradition in psychology and the implications that this view has for research in composing. The cognitive-developmental position has strong roots in Europe, particularly in the

work of the Swiss psychologist Jean Piaget. While Piaget's theory has become enormously influential in psychology, we know of no systematic delineation of its implications for research in written composition. Hence, our goals are two: first, we will discuss the general implications of the cognitive-developmental position as a framework in which to do research on composing; second, we will suggest four specific areas which have particular relevance for research in written composition.

General Implications

The compound designation *cognitive-developmental*, although somewhat awkward, describes accurately the two fundamental bases of the position. This psychology is cognitive in that it focuses on the way a person knows the world, on "mind" rather than on behavior. The extreme epistemological positions of humankind as inheritor of the essentials of knowledge (radical rationalism) and as tabula rasa creatures (extreme empiricism) are eschewed; in Piaget's theory, which lies between these extremes, humans actively construct knowledge through interaction with the world. Humans share with other biological systems the twin adaptive functions assimilation and accommodation; however, human adaptation is unique because activity results in a structured system of understanding as knowledge is built up into increasingly organized and differentiated schemes. The position is developmental in that it emphasizes the sequential stages through which mature intelligence emerges. One of Piaget's most fundamental insights was that children's thinking is not simply quantitatively different from adult thinking (children know less), but that it is qualitatively different (children reason in alternative modes).

The cognitive-developmental position is a theoretical paradigm in which to approach research: the position influences the kinds of questions one asks and guides the sort of projects one finds interesting. The cognitive-developmentalist believes that one of the most fruitful ways to understand any mature mental activity is to study the ontogenesis of that process in the child. Only when we have charted the genesis and development of an intellectual activity do we approach complete understanding of the "behavior" of mature human beings. And the cognitive-developmentalist posits underlying cognitive structures to explain observable actions. Thus, in research on composing, the cognitive-developmental approach shifts the emphasis from the *what* of composing (the product) to the *how* of

composing (the process). The theory leads one to ask how a composing skill develops and how a person is able to accomplish certain cognitive tasks.

Cognitive-developmental psychology offers composition researchers a theoretical basis, a research direction, and a methodology. We have mentioned, briefly, the theoretical foundation in Piaget's genetic epistemology. The theory suggests a research program, which we will discuss next, aimed at charting the developing structures underlying composing ability, with an emphasis on understanding the active mind of the child. We will conclude this chapter with further methodological considerations.

We believe that the cognitive-developmental position provides a broad and promising basis for research in composing. Although we cannot elaborate on all the potential implications, we have selected four specific issues in cognitive-developmental psychology which seem particularly applicable to research in composing: speaking-writing differences, the concept of error, egocentrism and audience awareness, and social-emotional development. Since we cannot exhaust even these few topics, in our discussion we aim to introduce each issue and raise important problems for research.

Speaking-Writing Differences

Although the relationship between spoken and written discourse may appear obvious, attempts to specify the precise nature of the relationship soon reveal a surprisingly complicated subject. On the one hand, speaking and writing are essentially alike: both are governed by the rules of semantics and syntax and both are dependent upon thought for something to say. In short, both are language used for communication. On the other hand, there are obvious differences between the modes in rate of development—spoken language develops both earlier and faster—and dependence on formal instruction—humans are biologically adapted for speech in a way they are not for writing: speech develops naturally, while writing must be learned through careful instruction.

There are at least two additional differences between speaking and writing. The first difference involves the immediacy of an audience. A speaker can observe the reaction of listeners and can profit from this "feedback"; however, a writer must try to imagine (and remain aware of) the hypothetical responses of a group of unseen readers. The second difference involves the facility of production in the two modes. The speaker can focus full attention on his or her meaning

because speaking is a much more fluent, automatic mode of expression. Since translation from idea to word is instantaneous, the physical production of the message is a subsidiary concern for the speaker. However, production is a problem for the writer because ideas tend to run ahead of expression. This is a special problem for the young writer, who must attend closely to the physical process of putting words on the page. In focusing attention on production, young writers can lose their meaning. With development, writers gain automatic control over production and can increasingly shift their focus to meaning. Nevertheless, the physical process of writing slows down production; ideas run ahead of words for even the most fluent writer.

There also seem to be more subtle and complex psychological differences between spoken and written discourse modes. The Russian psychologist Lev Vygotsky (1934/1962) was one of the first to theorize that speaking and writing are essentially different psychological processes. In brief, Vygotsky believed that the differences in developmental level in spoken and written language could be accounted for only through positing different cognitive pathways from thought to expression in the two modes. Vygotsky used the term *inner speech* to designate the verbal thought that precedes expression. Inner speech is a code consisting primarily of predicates. Translating from condensed inner speech to external speech is a relatively simple cognitive operation; the translating act is more difficult, however, when the end is written discourse, thus causing greater cognitive stress and requiring considerable mental effort. Vygotsky's important hypothesis is that writing bears a different relationship to inner speech. Although pregnant with implications for speaking-writing differences at the psychological level, this aspect of Vygotsky's theory, though often mentioned, has never been extensively studied.

Other researchers have pointed to differences in spoken and written language. For example, Newman and Horowitz (1965) conclude, quite forcefully, that

> *although writing and speaking can represent each other, that fact should not be taken to mean that they are aspects of each other.* Writing and speaking share in the manifestation and communication of language. Otherwise they are fundamentally and essentially different—as modes of verbal formulation and expression, as indicators of different psychological aspects of the person, and as channels of communication. (p. 164)

And E. Tory Higgins (1973), in a rare study which separates oral and written modes, remarks that

> all previous social class and developmental comparisons of verbal communication skills have tested only the oral channel of communication but, nevertheless, have made conclusions concerning verbal communication skills in general. A number of studies, however, have indicated that there are important differences between the oral and written channels of communication. (p. 70)

The issue of speaking-writing differences is important and requires further explication. From a researcher's perspective, the differences are important because, without understanding the relationship between the development of cognitive processes in the two modes, it is difficult to know how to interpret the substantial corpus of research literature on the development of children's oral communication skills. We believe that there must be some structural similarities between the cognitive operations underlying the two modes and hence that researchers in written composition should employ paradigms from oral communication research. Nevertheless, it would not be surprising to find rather substantial differences between the cognitive skills employed in the two modes.

The Concept of Error

Intellectual growth and language development are monuments to the efficacy of error. In the development of language and thought, we see a chain of "mistakes" that begins in infancy with errors about the nature of the physical world and continues through adulthood in errors about the abstract and hypothetical. The cognitive-developmental position values error, viewing it as a "window" into the mental processes involved in language use.

Piaget's own early interest in mental development was spurred on by his work in Alfred Binet's laboratory. Although his work involved standardizing test data, Piaget became fascinated by children's wrong answers, and he began to explore the processes by which children arrived at their responses. This focus on the underlying *how* (the mental operations) as opposed to a focus on the surface *what* (the answer itself) is a paradigm of the cognitive-developmental position. The fact that a writer makes an error is less significant than how he or she came to make that error.

Such a shift in focus has numerous implications for research and has already influenced other, related fields. In the field of second language teaching (ESL), we can trace a movement from concern with surface error to interest in the underlying cognitive system that produced the error (Kroll & Schafer, in press). The movement known

as Error Analysis has made impressive contributions to the advancement of psycholinguistic research in ESL (see Richards, 1974; Corder, 1975). In the field of reading instruction, the "miscue analysis" of Kenneth S. Goodman takes a cognitive-developmental approach, identifying the underlying sources of significant error rather than merely counting every deviation from the text in oral reading performance (Goodman, 1973).

Similarly, in composition research errors offer more than the bases on which to rate papers. The cognitive-developmentalist views the learner not as a passive slave to habits but as an active agent constructing a coherent view of the world. Errors are clues to the system of organized rules and intelligent strategies that a student draws on to perform a composing task. Since one important research goal is to study the emergence of these strategies, error would seem to offer an important research tool.

Egocentrism and Audience Awareness

One of the most compelling applications of Piagetian psychology to communication has been the link between egocentrism—a cognitive state in which a person fails to perceive others' perspectives—and lack of audience awareness. There is a very extensive literature in psychology on the role of egocentrism in children's cognitive development, particularly its effect on the development of communicative competence (Glucksberg, Krauss, & Higgins, 1975; Shantz, 1975). To condense vastly this fascinating literature, we will briefly review Piaget's initial research and its reformulation in the work of John Flavell.

Piaget's early work (1926/1955) on egocentrism and communication has generated as much heat as light. Potential confusion can be reduced by separating two aspects of Piaget's study of egocentrism and children's language. First, in observing children speaking together in a free-play setting, Piaget found that about 50 percent of their language was self-oriented, directed to no one. This phenomenon Piaget called "egocentric speech." Later research generally failed to find the same degree of self-oriented talk. Moreover, Vygotsky (1934/1962) attacked Piaget's concept for lacking functional significance. Piaget later conceded that this early hypothesis had been in error, that what he called, somewhat infelicitously, "egocentric speech" was not an index of children's egocentrism. Piaget (1962) agreed with Vygotsky that the phenomenon was external speech in a transitional state, on its way to becoming inner speech. Second, in several experiments on children's communication abilities, Piaget

found that before age seven, children were very poor at communicating information. Although a child knew the subject he or she was to explain, the speaker could not adapt the message for the needs of another child. The major problem was that the speaker could not take the other child's point of view. This, Piaget felt, was caused by egocentrism. Piaget has not changed his view of the pervasive influence of egocentrism on communication; indeed, his view has received substantial empirical support.

Incredible as it may seem, Piaget's theory of egocentrism and communication was largely ignored in America; the theory had, as Roger Brown (1965) expressed it, "no interesting follow-up for forty years" (p. 342). In 1968, John Flavell and his associates published a book of studies expanding the Piagetian view. Flavell used the concept *role taking* to denote a nonegocentric perspective: by taking the role of the other, a person could achieve awareness of audience requirements and hence adapt a message to the needs of listeners or readers. From his research, Flavell concluded that role taking (or, to use a synonymous term, *inference making*) involves four component processes: existence, need, inference, and application (the terminology used here follows Flavell, 1974). A person must first be aware of the existence of various points of view and be aware that others can have a different perspective than his or her own. Next, the person must recognize that a particular situation calls for role taking. Once the *need* for role taking is established, the person must actually make the inference about another's cognitive activity and then maintain that inference over a period of time. Finally, a person must apply the inference in a particular communication situation. Flavell's work shows that children gradually develop these four role-taking skills, and his theoretical model suggests that a message poorly adapted for a listener (or reader) can result from a failure at any stage in the role-taking process.

Egocentrism seems related to the classic issue of audience awareness, a traditional topic for research on composing. (See Britton, Burgess, Martin, McLeod, & Rosen, 1975, for an informative discussion of the child's developing "sense of audience.") A quite comprehensive literature exists on egocentrism and oral communication. But how does egocentrism affect written communication? There is some preliminary research evidence that egocentrism has different effects on spoken and written discourse (Kroll, 1977). Yet there are numerous unanswered questions about the rate of decline of egocentrism in written discourse, about the effects of difficulty level of tasks, and about the effect of egocentrism across various types of discourse (e.g., expressive, persuasive, informative).

Writing and Social-Emotional Development

Thus far, we have commented on the narrowly cognitive implications for research in composing. While as cognitive-developmentalists our principal research interests are in the cognitive domain, we recognize that people are more than minds and that writing can play a potentially important role in social-emotional, as well as cognitive, development.

Erik Erikson (1963) has outlined a theory specifically directed to social-emotional development. He believes that emotional health and social adjustment result when there is positive resolution to an ordered developmental series of crises that life presents in our industrialized Western society. For the infant, the first crisis is trust versus mistrust; for the child of three or four, autonomy versus shame; for the preschool child, initiative versus guilt. During the school years, children must learn to resolve the conflict between a sense of industry and inferiority; at adolescence, there is the crisis of identity versus identity diffusion. Children who achieve healthy resolutions at each stage eventually are able to develop identities, and by adolescence they know who they are.

Does writing provide a useful outlet for an examination of life's developmental crises? Can it be demonstrated that creative expression leads to understanding in the same way active manipulation does in infancy? Can adolescents use their expressive abilities to identify the often nebulously perceived anxieties that bedevil them? These are questions which are amenable to research (see, as one example, Ferrill, 1977).

Conclusion

For researchers working in the area of composing ability, the cognitive-developmental position offers a cognitive theory from which to generate hypotheses, a developmental research orientation, and a series of specific issues which merit investigation. It is important to note that the cognitive-developmental position also entails a research methodology that differs in several respects from the prevailing methods of much of twentieth-century social science. There has been an unfortunate tendency to ascribe prestige to disciplines by their ability to approximate the presumed precision of physics. This has led many social scientists to become operationalists and to treat all concepts as though they were behavioral because to do research like a physicist, you obviously have to count or measure

results. However, not all issues are amenable to experimental treatment. An exclusive reliance on operational definitions and experimental techniques can lead to the study of the measurable alone, often to the unfortunate neglect of the significant. Rather than look for problems that can be operationalized and studied experimentally, researchers should choose those problems that seem most cogent and then allow the problems to provide the direction for their solution. Sometimes a problem will require large-scale experimentation and sophisticated statistical analysis; but often, we believe, problems in the field of composition will suggest the small-scale, "fine-grained" analysis typified by the work of such psychologists as Marion Blank (Blank & Solomon, 1968) and, of course, Piaget (1929/1960).

Research in composing, because it must study complicated human functions, is going to be less "scientific" than physics; but the alternative—reduction of complexity by forcing concepts into behavioral statements—will lead to an understanding not of the original concepts, but only of the behavioral ones—and they are often not the same (see Deese, 1969; Wann, 1964). At present, the best course for research in composing is probably eclectic: choosing from a diversity of methods and combining various research paradigms. Because composition research is young, there is need for meta-research theory: for the proposal and exploration of new models and procedures for the composition field. Our cognitive-developmental background suggests that two very promising approaches (to coin properly elevated terms) will be "psychocomposition" and "developmental rhetoric."

5 Hand, Eye, Brain: Some "Basics" in the Writing Process

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Much of the current talk about the basics of writing is not only confused but, even more ironic, frivolous. Capitalization, spelling, punctuation—these are touted as the basics in writing when they represent, of course, merely the conventions, the amenities for recording the outcome of the process. The *process* is what is basic in writing, the process and the organic structures that interact to produce it. What are these structures? And what are their contributions? Although we don't yet know, the hand, the eye, and the brain itself surely seem logical candidates as requisite structures (Emig, 1975, pp. 11–13). The purpose of this chapter is to speculate about the role or roles each may play in the writing process and to suggest hypotheses, with appropriate methodologies, to assess their contributions, as well as to determine the likely forms orchestration and interplay may take.

Appropriately for early inquiries, experimental research into the writing process has thus far consisted of quite simple and direct modes of data collecting involving the observation—naturalistic and contrived—of usually immature but normally functioning writers. Continuing this line of inquiry will probably prove fruitful if the range of the sample is enlarged to include younger and older subjects and, more importantly, if researchers attempt to conceptualize their findings in original ways. As I have noted elsewhere (1975), what seems called for now are not duplications of such studies as *The Composing Processes of Twelfth Graders* (Emig, 1971), but replications which by definition require establishing fresh category-systems. In their dissertations, Frances Weaver (1973) and Donald Graves (1973) have enlarged our understanding with such characterizations of the process and of writers.

At the same time, new vantages are needed, especially if our ambition is to attempt sketching and then constructing a model or

models of the writing process. Establishing the essential components and structures of the process is, of course, requisite to such an effort.

How to ascertain what these essentials might be represents a fascinating and intricate problem in research. The major recommendation here is that we study, through the available literature and through direct observation, persons with specific and generalized disabilities, such as the blind, the deaf, and the brain-damaged. Although there have been many criticisms of the legitimacy of tapping these sources of data (as one instance, see Donald Murray's chapter in this book), attempting to infer the whole from the fragmented, the normal from the aberrant, the functional from the dysfunctional, is a classic research approach. Witness the research into that other intricate languaging process, reading, particularly during the first third of this century (see Robinson, 1946). Some may immediately protest that such an approach is too clinical or anti-humanistic. But these studies can and should be informed with the same humanism that has already distinguished the best inquiries in our field, such as those by Graves (1973) and Louise Rosenblatt (1968).

For clarity of presentation, I will focus in turn upon the hand, the eye, and the brain. Treating each of these discretely may be rhetorically satisfactory, but it is, of course, literally misleading. Research into perception has made it quite clear that, in part, we see and hear, as we move our hands, with our brain. To refer to the hand alone as moving, or the eye alone as seeing, then, has only metaphorical or organizational usefulness.

The Hand

In his introduction to *Writers at Work*, Malcolm Cowley recounts a statement Hemingway made after an automobile accident when he feared he had lost the use of his right arm: Hemingway commented simply that he thought he would probably have to give up writing. For how many others of us is the action of the hand, the literal act of writing, the motoric component, equally crucial? If we check sources of data from introspection to interviews with professional writers, we find there are many among us who, like Hemingway, must write at least first drafts by hand. I am one of this group, as are the two editors of this book. (Others like Henry James, Paul Gallico, and Donald Murray can dictate even novels, that mode of perhaps greatest intricacy, to a secretary. See Murray's chapter in this volume.) We cannot compose initially with any ease or skill at a

typewriter or into a tape recorder. Why? The speculations that follow come from introspection and from conversations with "like-handed" friends.

There seem to be at least four possible reasons for the cruciality of literal writing in the composing process. First, the literal act of writing is activating, mobilizing. It physically thrusts the writer from a state of inaction into engagement with the process and with the task. We have actually, physically begun to do something. In a very interesting paper, Linda Bannister of the University of Southern California suggests that the state of inaction is more properly thought of as resistance—"anti-writing" she calls it.[1]

Second, the literal act of writing may be for some of us an aesthetically necessary part of the process. We may be able to make personal statements initially or steadily only in our own personalized script, with all of its individualities, even idiosyncrasies. To employ the impersonal and uniform font of the typewriter may for some of us belie the personal nature of our first formulations. Our own language must first appear in our own script. In any case, the aesthetic pleasure of their own script has been important to well-known writers. Arnold Bennett, for example, taught himself a special script of great beauty in which to write his works of fiction (Drabble, 1974). And to examine authors' manuscripts is to be struck by the lucidity of many scripts, from Gerard Manley Hopkins's and Thomas Hardy's to John Berryman's and May Swenson's. In writing, our sense of physically creating an artifact is less than in any other mode except perhaps composing music; thus, the literal act of writing may provide some sense of carving or sculpting our statements, as in wood or stone.

Third, and correlated with the first, the literal act of writing, with its linear organization in most Western systems, may reinforce in some way the work of the left hemisphere of the brain, also linear in nature. The matter could just as well be formulated, however, in an inverse way, since we don't know which is the antecedent and which the consequent variable: because of the innate predisposition of the left hemisphere to proceed linearly, most written language is inevitably linear in form as visible analogue of the brain's workings.

A fourth reason is that writing by hand keeps the process slowed down. In an interview (*Literary Guild News*, 1977), Paul Theroux put one value on this slower pace: it allows for surprise, time for the unexpected to intrude and even take over.

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1. Bannister, L. *Anti-writing: A stage in the composing process.* Unpublished manuscript, University of Southern California, 1975.

> It's fatal to get ahead of yourself. Typing, you can take a wrong turning. But if you do it slowly, writing a foolscap page or two a day, in a year you are all done. That may sound like a long time, but it's not. It's like carving a statue. You can't rush it. (p. ii)

Writing by hand of course has disadvantages as well. Observing a slow pace, one can lose as well as find material since such a pace obviously puts a greater strain on the memory. For the child learning, perhaps at almost the same time, both to handwrite and to compose, the act of literally forming the words may well be, or become, the dominant and absorbing activity (those of us who have observed seven and eight year olds writing can attest to the accuracy of this statement). Such simultaneity of learnings may cause the later (lifelong?) confusion many of us have observed in older writers, the reversal of what Michael Polanyi (1967) calls "from-to attending." The writer attends *from* the message *to* the graphic formulation, rather than the other way around.

In all these speculations there are obviously research questions about the role or roles of the hand in the writing process. Here are a few:

> Theoretical
>
> For what kind of writer engaging in what mode or modes of writing is writing initially or steadily by hand a crucial component in the writing process? For what kind of writer does initial or later dictation or use of the typewriter serve?
>
> Applied
>
> Should children be presented with composing and handwriting at the same time, age, or grade level?
>
> How can teachers and administrators be made sophisticated enough not to use writing as a term that can mean equally penmanship and composing?

The Eye

Undoubtedly one of the most dramatic statements about the centrality of the eye to the act of writing comes from Jean-Paul Sartre. In an interview reported in the *New York Review of Books* (Contat, 1975), Sartre announced he was giving up writing due to loss of vision in his left eye through hemorrhages, because this, coupled with almost total vision loss in his right eye dating from early childhood, amounted to functional blindness:

> I can still see forms vaguely, I can see lights, colors, but I do not see objects or faces distinctly, and, as a consequence, I can neither read nor write. More exactly, I can write, that is to say, form the words with my hand, and I can do this more or less comfortably now, but I cannot see what I write. And reading is absolutely out of the question. I can see the lines, the spaces between the words, but I can no longer distinguish the words themselves. Without the ability to read or write, I no longer have even the slightest possibility of being actively engaged as a writer: my occupation as a writer is completely destroyed. (p. 10)

How does the eye participate in the process of written composing? If the process can be characterized roughly as having three stages—prewriting, writing, and revising—the eye seems to make at least one major contribution during each stage:

1. Prewriting: the eye is probably the major sense modality for presenting experience to the brain.
2. Writing: the eye coordinates with hand and brain for most of us, as Satre notes, during the literal, physical act of writing.
3. Revision: the eye is the major instrument by which we rescan and review what we have written.

Prewriting. In a fascinating and unique study, Géza Révész (1950) examined four well-known cases of sculptors who, tradition claimed, achieved great success in their art although they were all purportedly born blind. Through studying accounts of their lives, however, Révész became convinced that none of the four was congenitally blind. Speaking of the sculptor Kleinhans, for example, Révész demonstrates, persuasively to me, that "the really remarkable works attributed to him cannot be the creations of one who has been blind from his early youth" (p. 150). The experiment Révész conducted was to juxtapose Kleinhan's work against the sculpting efforts of blindfolded contemporary sculptors and of congenitally blind subjects. Congenitally blind subjects never make, it seems, symbolic transformations of the clay into personally or universally meaningful symbols: the clay stays a description—more accurately, a transcription—only. One thinks here of one of Susanne Langer's (1967) comments on symbolic transformation:

> A living process . . . entails the projection of "living form" in a symbolic transformation. The basic transformation in art is from felt activity to perceptible quality. . . . (p. 89)

Révész (1950) himself makes the following comment:

> From what sources could a blind person, who has never seen the world with all its wealth of forms and colour, derive those

> manifold experiences? He can never create new forms of expression, for that presupposes a rich and variable phenomenal world, *free fantasy arising from symbolic comprehension of nature. . . .* [Italics mine] It is only the symbolic and creative conception of given reality—in our case, the visual world—which enables the artist to translate the spiritual content into the supra-natural, non-material sphere of art. (The man born blind apprehends nature in only one manifestation: the strongest ties bind him to the material sphere; no one born blind is able to become aware of the diversity of nature and to apprehend all the rich and various appearances of objects.) (p. 150)

Révész makes the compelling point that without sight we do not possess the modality that permits most of us to become, in Ernst Cassirer's telling phrase, *animal symbolicum*, the animal who comprehends and makes *symbolic* representations of the universe. The symbol-making propensity humans possess may have to be visually activated. Only if we can make such representations of our experiences do we possess what is probably the single most basic resource for engaging in writing or, indeed, in any form of composing: combining and transforming *perceived* elements into coherent and sometimes fresh wholes, aesthetically pleasing to ourselves and to others. Certain questions, of course, immediately arise. Can't other sense modalities provide comparable data that will permit symbolic dealings with actuality? Don't the blind have language? Doesn't the possession of language itself make all of us, blind or sighted, *animal symbolicum*?

What kind of evidence based upon what kind of research would help us answer these questions? Before beginning some speculation, a note: I have just begun looking into the matter, but thus far I have not found a single case of a noted writer in any genre who was, or is, congenitally blind. Neither lyricist-composer Stevie Wonder nor dramatist Harold Krementz, for example, was born blind. And we all know that James Thurber and John Milton did not become blind until mid-life. Helen Keller, perhaps the best-known case of all, did not become blind until eighteen months of age. In a recent international writing contest for the blind, sponsored by the Jewish Braille Institute, not one writer adjudged a winner was born blind. Commenting on this fact, the Indian novelist Santha Rama Rau, one of the judges, said in a television interview that seeing for at least a very short period of time seemed requisite to writing successfully. The writing of the congenitally blind had a perceptually barren quality that was very striking, which tends to confirm the observations of Révész about nonsighted sculptors (see also Fraiberg, 1977).

Interesting questions, then, about prewriting and the blind would

seem to include the following: Is seeing the sensory mode in which most prewriting is conducted? Do we literally examine a subject or experience visually? If so, what constitutes prewriting for the blind or partially sighted? What obviously is needed is direct observation of such subjects engaged in the writing process, from perception of stimulus through "contemplation" of product, as well as detailed interviews with skilled and unskilled writers, both those congenitally blind and those who became blind in later life. Interviews with writers already cited, such as Wonder and Krementz, would be of great interest.

Writing. During the actual writing process, the eye coordinates with hand and brain to produce the evolving piece of writing. It is through the eye that most of us gain the sense of producing an icon, the product of writing. Bruner (1969), like Piaget, points out that we learn through three basic modes: (1) the motoric or enactive—"on the muscle"; (2) the iconic—"by the image"; and (3) the representational or symbolic—specifically, "restatement in words." If we are sighted, we make use of all three modes at once since the writing hand (motoric) produces the piece (iconic) that is a verbal symbolization (representational).

Research involving blind writers might help provide insight into the eye's role in the writing stage:

> Theoretical
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> Can an icon like a piece of writing be perceived only visually, or can another sense provide the iconic dimension? Does the physical effort of pressing a metal stylus through paper to produce Braille provide a *greater* sense of making an icon? By one interpretation, the page of Braille, with its configuration of raised dots, qualifies as a more obvious and more sensual artifact than a smooth page with its unraised, and consequently more abstract, product. To the blind, does Braille qualify as a graphic manifestation of verbal symbolization?
>
> Applied
>
> In the initial teaching of writing, should there be greater stress upon writing as the making of an icon with far more sensual manifestations (e.g., collage or self-made book)? M.C. Richards, the author of *Centering*, stresses the centrality of the making of an artifact.

Revision. As noted above, the eye is the major instrument by which we rescan and review what we have written. For Sartre (Contat,

1975), the most crucial need for the eye comes here in the process of revision:

> I can no longer correct my work even once, because I cannot read what I have written. Thus, what I write or what I say necessarily remains in the first version. Someone can read back to me what I have written or said, and if worst comes to worst, I can change a few details, but that would have nothing to do with the work of rewriting which I would do myself. (p. 10)

When the interviewer asked Sartre the obvious question about using a tape recorder, Sartre made an important distinction between visual and aural rescanning:

> I think there is an enormous difference between speaking and writing. One rereads what one rewrites. But one can read slowly or quickly: in other words, you do not know how long you will have to take deliberating over a sentence. It's possible that what is not right in the sentence will not be clear to you at the first reading: perhaps there is something inherently wrong with it, perhaps there is a poor connection between it and the preceding sentence or the following sentence or the paragraph as a whole or the chapter, etc.
>
> All this assures that you approach your text somewhat as if it were a magical puzzle, that you change words here and there one by one, and go back over these changes and then modify something farther along. . . . If I listen to a tape recorder, the listening speed is determined by the speed at which the tape turns and not by my own needs. Therefore I will always be either lagging behind or running ahead of the machine. (p. 10)

The eye, in other words, permits individual rhythms of review to be established and followed. Such individualism in pace, in contrast to the inexorable speed of the recorder, may be an essential feature for the making of substantive revisions and recastings (a distinction I have made among three levels of reformulating seems important in this context).

To determine the role of sight in the composing process, researchers may need to examine the work of the partially sighted or the medically blind writer. Perhaps such a person or group of persons can help us sort out the roles the eye truly plays in writing. To illustrate this point, I will continue to speculate a moment about how we revise. By the time most of us are adults, we have internalized the process of revision, which can be described as the outcome of a dialogue between ourselves as writer and ourselves as audience, an exchange in which our needs as readers become paramount. The blind, on the other hand, often must keep the process of revising

externalized; they must, unless they are exceptionally skilled users of tape recorders, continue an outer dialogue with an actual other as audience. This externalized dialogue may be a rich source of information about the commerce in the rest of us between ourselves as writers and as initial audiences. (This is not to suggest there aren't other avenues to comparable information, such as observing and taping the work of sighted writers of all ages as they work in peer groups when the peers serve as immediate, actual audiences; both James Moffett [1968] and Peter Elbow [1973] recommend this approach. And many classrooms employ it—the entire Cooperative Writing Program at Middlesex Community College in Edison, New Jersey, for example, proceeds from this premise.)

The Brain

In dealing with the brain, the questions for research, like the organ itself, are more complex. The current hypothesis about the brain that seems most generative for studies about the writing process is that the two hemispheres, the left and the right, have specialized, though not wholly unique, functions. A useful, if rough, delineation of these functions appears in Robert Ornstein's *The Psychology of Consciousness*:

> The cerebral cortex of the brain is divided into two hemispheres, joined by a large bundle of interconnecting fibers called the "corpus callosum." The left side of the body is mainly controlled by the right side of the cortex, and the right side of the body by the left side of the cortex. When we speak of *left* in ordinary speech, we are referring to that side of the body, and to the *right* hemisphere of the brain. Both the structure and the function of these two "half-brains" in some part underlie the two modes of consciousness which simultaneously coexist within each one of us. Although each hemisphere shares the potential for many functions, and both sides participate in most activities, in the normal person the two hemispheres tend to specialize. The left hemisphere (connected to the right side of the body) is predominantly involved with analytic, logical thinking, especially in verbal and mathematical functions. Its mode of operation is primarily linear. This hemisphere seems to process information sequentially. This mode of operation of necessity must underlie logical thought, since logic depends on sequence and order. Language and mathematics, both left-hemisphere activities, also depend predominantly on linear time.
>
> If the left hemisphere is specialized for analysis, the right hemisphere . . . seems specialized for holistic mentation. Its language ability is quite limited. . . . This hemisphere is primarily responsible for our orientation in space, artistic endeavor, crafts, body image, recognition of faces. It processes information more

> diffusely than does the left hemisphere, and its responsibilities demand a ready integration of many inputs at once. If the left hemisphere can be termed predominantly analytic and sequential in its operation, then the right hemisphere is more holistic and relational, and more simultaneous in its mode of operation. (p. 294)

Ornstein's description needs to be refined and modified in light of very recent research, particularly studies by Roger Sperry and his colleagues at the California Institute of Technology on split-brained subjects. These are people in whom the *corpus callosum* has been surgically severed to prevent epileptic attacks, for example, from spreading to both hemispheres. Some curious, yet logical, findings emerge in these studies. Two examples: if a split-brained patient picks up an unseen object in his or her left hand, the right hemisphere can recognize its shape, although the patient cannot speak the object's name. If the patient is asked to write the object's name, he or she can write it only with the hand controlled by the hemisphere that has perceived the object. These findings suggest at once the specialization and interdependence of the two hemispheres.

In a study of two split-brained patients, Dr. Eran Zaidel, a research fellow working with Sperry, found that the language ability of the right hemisphere, described by Ornstein and others as quite limited, may be less limited than once thought (Rensberger, 1975). Indeed, using an optical device he invented, Zaidel found through a series of language tests that the two subjects' right hemispheres had the vocabulary development of a fourteen year old and the syntactic ability of a five year old. And we know from the work of Brown, McNeill, and Slobin, for example, that the five year old's syntactic ability is considerable.

In addition, the brain-damaged and, as it were, the brain aberrant are a fascinating and important source of information about the roles of the two hemispheres in intra- and intercommunication. In *The Shattered Mind*, his review of the literature on the aphasic, Howard Gardner points out that all aphasics, "irrespective of the site of the injury," suffer impairment of their ability to write. Gardner ascribes this impairment to the number of competencies—he names "perceptual, motor, linguistic, cognitive"—that the process of writing entails (p. 294). It is with the aphasic, then, that an organic map of the writing process can begin to be sketched very lightly and very tentatively. For example, there are aphasics who can write but not read what they have written. With a condition even more dramatic and traumatic than Sartre's, can they continue in the act of writing without the ability to rescan and review? There are other aphasics

who have only long-term or short-term memory. Does writing require the activation of both? Can an amnesiac write? As part of such an inquiry, Dixie Goswami of Middlesex Community College, a doctoral candidate at Rutgers, is currently collecting data for a dissertation concerning the composing behaviors of a small sample of aphasics with lesions in the same hemisphere.

Writing seems to require the establishment of firm figure-ground relations—of what shall be stressed, perhaps through the deployment of superordinates, and what shall be subordinated, through the literal deployment of subordinate phrases and clauses. Persons with organic, chemical, or psychological impairments (I do not want to commit myself to a single hypothesis) often cannot distinguish between elements that are incorporating and those that are illustrative. By one hypothesis (Arieti, 1974), the schizophrenic, for example, consistently treats genus as species. What kind of psychic wholeness is demanded for writing successfully?

The possible implications for research into the writing process of this and comparable work with the brain are immense. One is the logical assumption that there may be biological bases for composing behaviors. Before speculating about what these might be and how we can learn about them, it is important to cite a caution, well-formulated recently by George Steiner (1975):

> Over the next years there *may* be a spectacular progress of insight into the biochemistry of the central nervous system. Though it is conceptually and practically extremely difficult to isolate a single type of stimulus from the fact of stimulation as such (environment connects at every point), refinements in microbiology may lead to correlations between specific classes of information and specific changes in protein synthesis and neuronal assembly. At the biochemical level, the idea that we are "shaped" by what we learn could take on a material corollary. On present evidence, however, it is impossible to go beyond rudimentary idealizations. (p. 288)

Let me here suggest one hypothesis logically emanating from current work on the brain and share one method for ascertaining its possible validity. Ever since the beginnings of rhetoric study, as early as the fifth century B.C. in Sicily and Greece, there have been attempts to categorize the different modes of discourse in which we speak and write. Aristotle, of course, supplied the definitive early category system which rhetoricians through the centuries have adapted and transformed. In recent rhetorical study and writing research, Jakobson, Kinneavy, and Britton have attempted relatively fresh category systems. Their categories, like Aristotle's, share loose

and almost metaphysical understandings about the differences between such seemingly distinct modes as argument and poetry. Even with the most recent work, one has the impression of being in the presence of an inquiry that Thomas Kuhn (1970) would characterize as being in the preparadigmatic stage.

What if it is the case that classical and contemporary rhetorical terms, such as *argument* and *poetry* or *extensive* and *reflexive*, may represent centuries-old intuitive understandings that the mind deals differentially with different speaking and writing tasks? To put the matter declaratively, if hypothetically: modes of discourse may represent measurably different profiles of brain activity.

The electroencephalogram measures brain activity through electrodes attached to relevant portions of the skull. In fact, there is now a computer program whereby a given encephalograph can be broken into a profile which differentiates left-hemisphere from right-hemisphere activity. Two of us at Rutgers have begun to ask a small sample of normal adult subjects to compose aloud in two seemingly distinct modes while undergoing an EEG and note whether or not composing behaviors yield differentiated profiles of brain activity. (First thoughts suggest that argument would be predominantly left-hemisphere, poetry or narrative, right.)

Implications for Research Training and Teaching

Changes in the directions of English education research obviously require concomitant changes in the training of the researcher in the doctoral curriculum. All of us, including senior faculty and advisers, must learn far more about biology and physiology than we have previously been asked to learn. Closer ties with departments of biological sciences and with the medical schools affiliated with our universities also seem to be suggested.

At Rutgers we have established two connections with our medical school that will undoubtedly grow firmer and more formal as more of our students elect clinical problems to investigate. One is attendance at open lectures on psychophysiology sponsored by the faculty of the medical school; the other is actual participation in the medical school sequence, such as seminars on anatomy and the brain. A third link currently being contemplated is participation of our students in the teaching rounds involving third- and fourth-year medical students and the medical school faculty.

Possible implications for the learning and teaching of writing are even more formidable and far-reaching. Nelson Goodman once

commented that the American educational system is half-brained. The situation may be even more serious: What if the schools require students to be split-brained where the learning of writing and other complex arts and sciences are concerned? Perhaps the only base for the curriculum should be what research suggests is literally organic. And for the process of writing, what is truly organic? Let us begin to find out.

6 The Writing of Young Children

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In his 1929 summary of research relating to grammar, language, and composition, Rollo Lyman suggested that the process of composing was such a complex phenomenon that it defies analysis into constituent parts. He wrote that the studies to that date "measure pupil products and assume that by so doing they are evaluating the manifold intangible processes of the mind by which those products were attained" (p. 274). Richard Braddock, Richard Lloyd-Jones, and Lowell Schoer in the 1963 *Research in Written Composition* recalled this conclusion and reported that research since the Lyman statement led essentially to the same conclusion, adding that "some questions which seem fundamental in the teaching and learning of written composition apparently have gone almost untouched by careful research" (p. 52).

This absence of research on the composition process was also evidenced in the 1960s in a number of other reports by researchers and by groups studying research. For example, the report by Louise Rosenblatt (1963) of the New York University Research Development Seminar does not mention the writing process or the processes of the mind that result in a written product. Instead, the suggestions for research in the area of writing dwelt upon various methods or approaches and upon differing instructional content as possible variables in designing experimental research. In fact, and this is difficult to believe, considerable attention was given to the role of grammar teaching as it might affect writing, a role that most researchers and observers believed to have been laid to rest many years before.

Fortunately at the same time there was considerable interest being voiced for new approaches, for examining research designs and directions, and for presenting new research problems. For example, these questions were asked in *Research in Written Composition* (p. 53):

"What is involved in the act of writing? How does a person go about starting a paper? What questions must he answer for himself?" The report summarized by saying that "composition research . . . is not highly developed" and suggested that "if researchers wish to give it strength and depth, they must reexamine critically the structure and techniques of their studies" (p. 5).

A follow-up voice at the time was that of Jean Hagstrum (1964) who, in reviewing *Research in Written Composition*, cautioned against doing more of the same kinds of research that had been done without first attempting to find out what writers do when they write—what they think about, what steps they follow, how they get ready for expression. Ruth Godwin (1963), writing at about the same time in the *Canadian Education and Research Digest*, pointed to the need to discover how children go about drawing on their oral language skill when they write.

Interest in research designs that break out of the experimental mold was also on the rise. Henry Meckel (1963) suggested that the case-study procedure should be useful in discovering or throwing light upon such things as "the relationship of different facets of personality to writing behavior, particularly on the dynamics of such relationships and on the dominant patterns of personality involved" (p. 1004). And suggesting that procedures in the case study are viable, Jack Kittell (1968) stated that a particular skill, such as writing, "as indicated in an individual's behavior, is susceptible of study and description" and that there "are available different specialized ways of observing and describing this behavior" (p. 5).

A New Research Focus

My own interest in the writing process goes back to the early 1960s. I had reviewed much of the literature about writing and was engaged in a study (Petty, Herold, & Stoll, 1968) of what the profession knew about the teaching of vocabulary. This study led to the conclusion that we knew little about such teaching. Some of the fault was with research design, but I also had the feeling that the vocabulary researchers did not know enough about children's thinking and behavior to have asked the right research questions. The fact that one researcher after another appeared to be dealing with the same old questions in studying vocabulary teaching seemed closely related to the faulty writing research. Hence, I began to discuss the need to examine processes, to observe children, to examine their behavior, and to formulate new research hypotheses. It seemed to me neces-

sary that our research should focus upon processes and better questions—and be pursued largely through case-study approaches—so that later research of more traditional experimental design might result in more definitive responses to teaching issues.

This observation and the statements of Braddock et al., Meckel, Parke (1960–61), Godwin, and others led to research into the writing processes of young children, first by Margaret Sawkins (1970) and later by Robert Zanotti (1970), Donald Graves (1973, 1975), Dionysios Melas (1974), and Ann Bodkin (in progress). The research ideas and the investigatory efforts of these researchers were also both prompted and supplemented by the research of others, particularly Janet Emig (e.g., 1971), but also Barbara Holstein (1970) and Charles Stallard (1974). In addition, the wise observations of Alvina Burrows (e.g., 1976a and 1976b) and James Britton (e.g., 1967) were especially important.

I cite this rise of interest in the composing processes—much of it taking place at the State University of New York at Buffalo—primarily because it shows at least some change of direction in research efforts from that of a little more than ten years ago. The interest in research on composing is especially strong at Buffalo, as evidenced not only by the names of some of the researchers I have cited but also by the conference for which the papers collected in this volume were originally written. This interest is further reflected in the publication of papers delivered at SUNY Buffalo's 1975 Conference on Language Arts (Petty & Finn, 1975) and in the number of our students interested in composition at the secondary and college levels, as well as those interested in the composing of young children. We are glad the interest is strong. However, the work at Buffalo simply reflects the growing interest, now more than nationwide, in research on the processes of composition.

In designing and conducting research on the composing process, there are some basic ideas that should be kept in mind. First of all, composing is inherent in using language. Each sentence is a composition. A series of sentences that relate a child's needs or experiences is a composition. Thus, every child, indeed, every individual, does have ability in composition. Not everyone's composing ability is equal, of course, and the major problems seem to appear in written composition.

Most individuals, in some situations at least, may not vocalize a well-organized, coherent message. The reasons for this failure may be the emotional setting, a lack of experience, disorganized thinking, and so on. But frequently the difficulties of oral composition are overcome by repetitive statements, gestures, exchanges with the

listener, and the like; thus, the concern about composing focuses mainly on writing. While written composition may be intimately related to oral composition—and I would argue that it is—it is also uniquely different and particularly tough. I won't belabor this point, because it is frequently made by others. I simply want to stress that children struggle with the transition from the basically overt language of speech to the essentially covert activity of writing. We need to recognize these struggles, which are evident in children's behavior, as factors very strongly affecting composing.

A second fundamental consideration is whether the meaning of the term *composing process* as it is used in much of the literature is the same as the behavioral process engaged in by an individual as he or she writes—or even those behaviors observable in oral composing. Judgments may certainly be made about composing by analyzing the content and structure of the composition product, but, since such an analysis is largely judgmental, whether very much can be told about the actual process—what the individual actually does—seems doubtful. For instance, in a study by Richard Meade and W. Geiger Ellis (1971), various kinds of writing were examined to determine the methods of paragraph development employed by writers. The categories of paragraph development were based upon the procedures or methods advocated by various textbooks. While this kind of study may tell us something about forms of paragraph organization used by different writers (although I have some doubts about the discreteness of the various "methods"), it seems to me it tells us nothing about the processes that the writers engaged in.

Eugene Smith makes the same point in his *Teacher Preparation in Composition*. He says that "the easiest and perhaps the most 'logical' way [of examining the composing process] is to be analytic—to start with the finished composition, oral or written, to examine its components, to give terms to them, and to explain how and why they were assembled so" (p. 5). He goes on to say that "one may . . . observe that it leads to smaller and smaller bits and proceeds in the opposite direction from the actual process of composing" (p. 5). In other words, beginning with the product is the systems engineering or task analysis approach. The difficulty is that such an analysis fails to work because the task (the composing) varies so greatly from one individual to another and from one purpose to another.

My point is the propensity of researchers to apply a particular kind of logic to research questions. We have historically followed this logic as we have examined written products in terms of various instructional procedures, writing conditions, curriculum content, or some

combination of these. The research has asked such questions as, What are the effects of various stimuli on the writing of children? What can we learn about the writing of children by examining their writing products? What are some of the correlates between writing and other skills? What effect do various instructional methodologies have on children's writing? What are the relationships among such things as room atmosphere and feedback structures and the writing of children?

It is difficult for researchers to break this pattern because of the logic of examining products and the tradition involved. Certainly the questions listed previously, and the more specific questions deriving from them, still need attention. However, I believe the focus of composition research should be upon the writer's behavior rather than upon the product. Thus, I would like to report on several studies focusing on writer behavior, including some of the findings of these studies and the procedures the researchers used. Because of several research limitations, the findings should generally be regarded as tentative. But since establishing the need for new research directions was the goal of several of the studies, the tentativeness of the findings is defensible. My citing them is intended to stimulate thought on the task of researching the composing process.

Sawkins (1970) used an interview technique to investigate what fifth-grade children did in writing compositions, particularly what differences there were in the actions of children whose compositions were judged to be of high quality and those whose compositions were considered to be of low quality. Essentially she found that there were few differences between the two categories of students in what they said they did in preparing for writing and in actually writing. The most pronounced difference was the concern of the better writers about the content of their expression and about the more sophisticated aspects of mechanics such as sentence structure and paragraphing. Sawkins further reported the following:

1. Children tend to consider aspects of content before they begin writing and while they are writing.
2. Little or no attention is ever given to making notes or an outline before writing begins.
3. Children apparently do not have a complete composition (usually a story) in mind before they begin writing.
4. Children appear to give little special attention to choice of words for particular purposes, to construction of sentences, or to any conventions of paragraphing.

5. Except for questions about spelling, there is little asking for help from teachers; however, the children probably would seek more help if they thought it would be given.
6. Some children appear to proofread, others do not.
7. The quality of boys' writing is lower than that of girls.

Sawkins's basic procedure, interviewing ten- and eleven-year-old children, may be subject to question. Will children accurately report what they did? Sawkins felt that they were reliable informants, and what they reported was confirmed in some areas by their products and the observations of both teachers and the researchers. Whether another researcher would have the same success or whether students of another age level would be as reliable certainly needs verification.

A study that I am less familiar with personally was done by Stallard (1974) as a doctoral dissertation at the University of Virginia. While this research was directed at the writing processes of twelfth graders rather than those of young children, both his procedures and findings seem relevant.

Stallard's data were secured from an observational checklist, an interview, and an analysis of the writing products. All three procedures were used with the intention of discovering what the students did as they wrote. The checklist, used without the writers knowing it, recorded the time the assignment was received, the time the physical act of writing began, and the time the writing was completed. The checklist also noted whether the writer made an outline, engaged in random activity before writing, talked with peers before and/or during writing, made corrections before completing the writing, stopped at intervals, read what had been written, changed punctuation, used a dictionary, rewrote a first draft, and so on. Provision was also made for recording the hesitations of the writers. In the interviews, questions were asked about such things as whether writers sought to develop paragraphs in particular ways, whether they had done revisions (either mentally or in actual writing), and whether an outline had been made. The interviewer also sought to determine if the writer had a purpose in mind while writing and what the purpose was. Analysis of the product consisted largely of determining by examination the extent of corrections, rewriting, and changes in words and style.

Among Stallard's findings were these:

1. Good writers spend more time both at prewriting activities and at actual writing than writers of poorer compositions.

2. Good writers tend also to be slower, to do more revising (particularly as they read what they have just written), and to stop more often to do this reading.
3. Good writers are more concerned with the purpose of the writing than poorer writers.

A study by Graves (1973; see also 1975) focused specifically on the composing processes of young children. Graves studied the writing processes of seven-year-old children by detailed observation of individual children as well as by interviewing, analysis of compositions, and observation of groups of children. In addition, he sought to relate various aspects of writing behaviors to differences in classroom settings, which he labeled as "formal" and "informal." However, the most significant aspect of his study was the extent to which he was able to use a case-study design as the principal research procedure for studying the writing processes of eight of the children.

I think the most promising finding of the study was that the case-study method of research is a most effective means for determining the variables that seem to bear upon a child's writing. Because Graves did case studies of eight children, he was able to identify behaviors common to all of these children as well as ones unique for each child. From this comparative base, he was also better able to interpret and assess both the writing processes and the writing products of the other eighty-six children studied less intensively. Case studies are not new to research, but seldom have they been used in educational research in general or in studying composition.

Also particularly significant was the finding that the informal classroom environments gave the children greater choice in their writing and produced more writing. A related finding was that, given the choices of whether to write or not and of what to write, children wrote more frequently and produced compositions of greater length than when specific writing assignments were given and/or when considerable amounts of writing were assigned. In fact, Graves felt that assigned writing inhibited the range, content, and amount of writing done by the children. He also found that boys wrote more than girls when writing tasks were not assigned, that boys seldom used the first person in their writing, and that their writing dealt more with what he termed "extended territory"—that is, removed from home, school, and neighborhood—than the girls' writing.

Graves concluded that there appear to be two distinct types of writers. He identified these as *reactive* and *reflective*. Reactive writers use erratic solving strategies: they talk to themselves, their writing reflects an action-reaction approach, they lack a sense of audience,

and they seldom contemplate what they have written. Reflective writers rehearse little before writing, periodically reread, and show a growing sense of audience. Graves says that the characteristics of each type of writer exist in varying degrees in all of the children he closely observed but that the clustering of the traits in a child should be particularly useful in predicting his or her writing behavior.

Graves made other observations too detailed to relate here. Any researcher of the composing process would do well to study both the procedures Graves used and his findings.

Another study—in some respects an extension of the Graves study—is one done by Melas (1974). Melas, however, reverted to a focus on products, being concerned with the themes of compositions written by children in grades two, three, and four, although he also determined reactions to procedures teachers used. In examining what children wrote about, he compared the frequencies of various composition themes chosen by children and assigned by teachers. Melas found that teachers often do not assign composition themes that correspond to children's interests. That is, when permitted to do so, children wrote about subjects that had never been assigned. For example, some teachers did not assign sports subjects; yet, when writing was not assigned, many children chose to write about sports. Melas also found that compositions with descriptive themes were written more frequently than those with imaginative, narrative, or characterization themes. He attributed this to teacher emphasis upon "telling about" some object or event and a lack of guidance as to how other themes might be developed.

Ann Bodkin, a doctoral student at SUNY Buffalo whose investigation is now being completed, also sought to extend the Graves study by determining if differences exist in the written expression of boys and girls with respect to:

1. The number of times the pronoun *I* appears in children's writing.
2. The extent to which *I* is used in an emotive sense, e.g., "I love animals because they are so cute and cuddly."
3. The extent to which *I* is used in a reportive sense, e.g., "I saw a car crash" or "When I grow up . . ."
4. The territorial range of the content of the writing, that is, whether the content is primary—home, school, and immediate neighborhood—or extended beyond these limits.
5. The frequency of the writing and its length.

These questions were investigated in the writing of children in grades three and six and at three socioeconomic levels. Preliminary findings indicate that there are significant differences in each of these, except for the emotive *I*, between boys and girls at each grade level and between the children in the socioeconomic levels found at each grade level. Bodkin has also found that out-of-school experiences greatly influence what children write about (also noted by Graves and Melas) and that the time of day when the writing is done influences the choice of content.

A procedure she used in order to minimize differences in the writing conditions in the several schools was having the children write in journals. Her observation is that children like to write in journals; in fact, if children were absent, they generally wrote entries for the days they missed without being told to do so.

These last two studies are not in the pattern of the others I have reported in the sense of investigating the composing process. Yet they both deal with the process indirectly, and they are both outgrowths of the Graves study. My feeling is that more research is still needed to verify specific process behaviors. However, following up the leads of Sawkins, Stallard, Graves, and Emig should not prevent us from following up the findings of Melas and Bodkin.

Implications for Teaching

The findings of these studies suggest some teaching practices. And I do mean *suggest*, because the findings require verification before a strong position of advocacy of a particular methodology is warranted. Yet studies done by researchers who are also wise and experienced teachers, who establish a rapport with children and closely observe them as individuals, and who really understand curriculum and instruction lead me to pay considerable attention to their statements of implications for teaching.

Sawkins's finding that children do not make notes before writing suggests that they should be given specific training in this preparatory technique so that they may capture and retain ideas in brief forms. Sawkins believes that such notes may also help children organize their thinking, aid them in choosing words more carefully, and perhaps help with problems of convention such as spelling. Even more significantly, Sawkins suggests that teachers be more available for giving individual help while children are writing rather than following what appears to be a rather common practice of insisting that children write "on their own." Providing immediate help should

surely result in better composition and perhaps facilitate the development of the child's composing process. Sawkins pointed out that even the children who wrote the poorest compositions were quite aware of many of their problems, were willing to discuss them, and seemed eager to improve their writing.

Graves's findings about the writing done in an informal setting certainly has classroom application. Likewise, the findings of both Graves and Melas that unassigned writing apparently stimulates boys to write and results in longer compositions are significant for classroom practices. Graves's close observation of children indicates the importance of concrete objects for motivating writing; it also suggests that children's compositions should be kept and made available to them and that pupil-teacher conferences might influence children's composing.

Both Graves and Bodkin report that writing in a journal (a notebook really) appeals to children. Part of this appeal seems to be the diary aspect of the writing, which probably means that the children regard this writing as really their own, unlike papers "turned in" that usually disappear.

Research Directions

As we study the composing process—or as I would prefer it, the composing processes—as it applies to writing, we must try to discover why some writers seem not to use processes common to most others. While it is probably true that few children, whether good writers or not, make outlines for their compositions, there are undoubtedly both good and poor writers who do make outlines. The same is true for virtually every other behavior that has been noted.

Also, in studying the processes of writing, we ought not overlook the nonwriter—the child who writes virtually nothing. What behaviors does he or she exhibit? What does this child do to avoid writing? Are there some noncomposing processes?

The differences in what children write about, the frequency of writing, and the length of compositions when the writing is not assigned—as observed by Graves, Melas, and others—certainly seem to be significant points for further investigation. Do these observations hold up in other settings? At other grades and age levels? In larger groups of children?

These questions establish the need to examine the teacher and classroom environment variables that foster unassigned writing. Some teachers say that children will not write unless they are told to

do so. Yet, other teachers find that children write a great deal and seek to improve their writing if they are not forced to do so. Some new questions need to be asked: Do children struggle as much with writing as I have suggested? Or do they struggle because we have put writing in a framework that inhibits communications and/or expression?

There are, in addition, questions which relate to individual development. Do we need to find out more about behavioral differences at different maturity levels? Can classroom environments affect these behaviors to any extent?

The case-study procedure of course needs more research attention, as do procedures for observing groups of children and individual children in group settings. For instance, can we observe more effectively by using a camera and tape recorder? How can such equipment be better used as research tools? In another vein, can using selected aspects of the case-study procedure yield as much information about process as a more extended study does?

These suggestions for future research are only a sampling of the possibilities. The principal point is for researchers to stop examining products as if the processes of composing will leap out at them from the pages they are studying. The product is not behavior, nor does it represent what has gone on in the individual's mind. It is only a product; process is what people do.

7 Internal Revision: A Process of Discovery

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Writing is rewriting. Most writers accept rewriting as a condition of their craft; it comes with the territory. It is not, however, seen as a burden but as an opportunity by many writers. Neil Simon points out, "Rewriting is when playwriting really gets to be fun. . . . In baseball you only get three swings and you're out. In rewriting, you get almost as many swings as you want and you know, sooner or later, you'll hit the ball."

Rewriting is the difference between the dilettante and the artist, the amateur and the professional, the unpublished and the published. William Gass testifies, "I work not by writing but rewriting." Dylan Thomas states, "Almost any poem is fifty to a hundred revisions—and that's after it's well along." Archibald MacLeish talks of "the endless discipline of writing and rewriting and rerewriting." Novelist Theodore Weesner tells his students at the University of New Hampshire his course title is not "Fiction Writing" but "Fiction Rewriting."

And yet rewriting is one of the writing skills least researched, least examined, least understood, and—usually—least taught. The vast majority of students, even those who take writing courses, get away with first-draft copy. They are never introduced to the opportunities of serious revision.

A search of the literature reveals relatively few articles or books on the rewriting process. I have a commonplace book which has grown from one thin journal to 24 3-inch-thick notebooks with more than 8,000 entries divided into prewriting, writing, and rewriting. Yet even with my interest in the process of rewriting—some of my colleagues would say my obsession—only four of those notebooks are labeled rewriting.

I suspect the term rewriting has, even for many writers, an aura of failure about it. Rewriting is too often taught as punishment, not as

an opportunity for discovery or even as an inevitable part of the writing process. Most texts, in fact, confuse rewriting with editing, proofreading, or manuscript preparation. Yet rewriting almost always is the most exciting, satisfying, and significant part of the writing process.

The Writing Process

The most accurate definition of writing, I believe, is that it is the process of using language to discover meaning in experience and to communicate it. I believe this process can be described, understood, and therefore learned. Prewriting, writing, and rewriting have been generally accepted as the three principal divisions of the writing process during the past decade. I would like to propose new terms for consideration, terms which may emphasize the essential process of discovery through writing: *prevision, vision,* and *revision.*

Of course, writing will, at times, seem to skip over one part of the writing process and linger on another, and the stages of the process also overlap. The writing process is too experimental and exploratory to be contained in a rigid definition; writers move back and forth through all stages of the writing process as they search for meaning and then attempt to clarify it. It is also true that most writers do not define, describe, or possibly even understand the writing process. There's no reason for them to know what they are doing if they do it well, any more than we need to know grammatical terms if we speak and write clearly. I am convinced, however, that most writers most of the time pass through the following distinct stages.

Prevision. This term encompasses everything that precedes the first draft—receptive experience, such as awareness (conscious and unconscious), observation, remembering; and exploratory experience, such as research, reading, interviewing, and note-taking. Writers practice the prevision skills of selecting, connecting, and evaluating significant bits of information provided by receptive and exploratory experience. Prevision includes, in my opinion, the underestimated skills of title and lead writing, which help the student identify a subject, limit it, develop a point of view towards it, and begin to find the voice to explore the subject.

Vision. In the second stage of the writing process, the first draft—what I call a discovery draft—is completed. This stage takes the shortest time for the writer—in many cases it is written at one sitting—but it is the fulcrum of the writing process. Before this first draft, which Peter Drucker calls "the zero draft," everything seems

possible. By completing this vision of what may be said, the writer stakes out a territory to explore.

Revision. This is what the writer does after a draft is completed to understand and communicate what has begun to appear on the page. The writer reads to see what has been suggested, then confirms, alters, or develops it, usually through many drafts. Eventually a meaning is developed which can be communicated to a reader.

The Importance of Discovery

My main concern in this chapter is revision. But to be able to understand what I consider the most important task in the revision process, we have to appreciate the fact that writers much of the time don't know what they are going to write or even possibly what they have written. Writers use language as a tool of exploration to see beyond what they know. Most texts and most of our research literature have not accepted this concept or dealt with its implications.

Elie Wiesel says, "I write in order to understand as much as to be understood." The poet Tony Connor gives a recipe for writing a poem: "Invent a jungle and then explore it." William Stafford states, "You don't know what's going to happen. Nobody does." I have included at the end of this chapter forty-seven other quotations from my commonplace book which testify to the essential ignorance writers feel many times about what they are writing.

In teaching writing I often feel that the most significant step is made when a student enters into the writing process and experiences the discovery of meaning through writing. Yet this process of discovery has not been generally explored or understood for a number of reasons. First of all, it has not been experienced by nonwriters or admitted when it is experienced by writers in the less imaginative forms of writing. One professor of philosophy, after reading a text of mine, confessed he had been ashamed of the way he wrote, that he didn't know what to say or how to say it when he sat down to write. He had to write and write and write to find out what he had to say. He was embarrassed and didn't want his colleagues to know how dumb he was. When he read my book he found his activities were legitimate. I suspect such unjustified shame is more prevalent than we like to admit. Another professor told me recently that he makes assignments he could not complete by his own deadline. He explained, "My students are smarter than I am. I have to rewrite and rewrite many drafts." Yet he neither "confesses" this to his students nor allows them the opportunity to perform the writing

task essential for them to achieve publication.

Most professors who are aware of the process of rewriting to discover meaning are uncomfortable thinking about it, to say nothing of discussing it in class. Discovery seems the province of the "creative writer," the writer who deals in poetry, fiction, or drama. Such activities are not quite respectable in the academic community, where we too often have a sex manual attitude: it's okay to read about it as long as you don't do it. But I am an academic schizophrenic, a "creative" writer and a "noncreative" writer. As the chairperson of a rather large department, I spend a good deal of my time writing memos to deans and vice provosts. (That's really creative writing.) I also moonlight occasionally as a corporate ghostwriter. I publish texts, novels, poems, and "papers." And in all of these roles I find the process of discovery through language taking place. I do not agree with the educational segregation of functional and imaginative writing, creative and noncreative writing. I know the process of discovery takes place when I write fiction and nonfiction, poetry and memos. To produce letters, reports, novels, essays, reviews, poems, and academic papers that say something, you have to allow language to lead you to meaning.

In drafting this paper I found myself writing, as I attempted to define the writing process, that the writer, after the first draft, is "not dealing with the vision but a fact." The word vision surprised me. It appeared on the page without premeditation. In reading it over I cut the sentence but decided the word was a better term than *writing* to describe the second stage of the writing process and, working from that point, saw the virtue of using the term *revision* for rewriting and then tried on the term *prevision* for size and found it fit, although I can't find it in my dictionary. I'm not sure that this is a discovery of enormous value, but it was fun; and I think this accident of language, this business of using words I didn't know I was going to use, has helped me understand the writing process a little bit better.

I suspect most of us have experienced many similar discoveries, but we feel it a failure: if we had a bit more IQ, we would have known the right word. I find few English teachers are comfortable with the concept of uncalculated discovery. They simply do not believe the testimony of writers when they say they write what they don't know, and this may indeed be an uncomfortable concept if you spend your classroom hours analyzing literature and telling your students exactly why the writer did what he or she did, as if literature resulted from the following of a detailed blueprint. Writing, fortunately for writers, is much more exciting than that. The writer does plan but

keeps adapting those plans to what is discovered on the page.

The writer, however, who lives in the academic community—and today most of us do—is surrounded by people who seem to know precisely what happens in a piece of literature. The other night my colleague, the poet Charles Simic, said his favorite poems were the ones he didn't understand, an unsettling confession in a department of English. It is hard to admit that you don't know what you're doing when you write. It seems a bit undignified, perhaps even cause for the removal of tenure. Surely my governor would think I ought to know what I'm doing when I sit down to write—I'm a full professor, for goodness sake—and yet I don't. And hope I never will.

Listening to a lecture the other day, I found myself doodling with language. (The better the lecture the more likely a piece of writing will start to happen on my notebook page.) From where I sat in the lecture hall, I could see an office door, and I watched a person in that office get up and shut the door against the lecture. It was an ordinary act, yet, for no reason I can recall, I found myself writing this on the page:

> I had an office at a university, an inside office, without window or air. The classrooms up and down the corridor would fill up with words until they spilled over and reached the edge of my half-opened door, a confident, almost arrogant mumble I could no longer bother to try to understand. Was I to be like the makers of those words, was I already like the students in my own Freshman sections? Perhaps the only good thing about this position was that Mother was dumbly proud and Father puzzled and angry, "Is this where they put you, an educated man? The union would kill me."
>
> If I hadn't killed a man, my life would have seemed trite. . . .

I have followed this short story for only a couple of pages in the past few days. I am ashamed to reveal the lines above— I don't know if they will lead me to a story—but I'm having fun and think I should share this experience, for it is revealing of the writing process. I did not intend to write a short story. I am working on a novel, a book of poems, and articles such as this one. Short fiction is not on the menu. I did not intend to write an academic short story. I do not like the genre. I do not particularly like the character who is appearing on my page, but I am interested in being within his head. I have not yet killed a man, to my knowledge, and I have never been a teaching assistant, although I have known many.

I want to repeat that there was absolutely no intent in what I was doing. The fact that the character had killed a person came as a total surprise to me. It seems too melodramatic, and I don't like this

confessional voice, and I do not like the tense, and I have trouble dictating these words from my notebook to my wife, because they keep changing and leading me forward. I do not know if the killing was accidental or premeditated. I don't know the victim. I don't know the method. I don't know if it was imaginary. I do know the phrase "killed a man" appeared on the page. It may have come there because of what the father said; or, since in the next paragraph I discovered that the young man feels this one act gives him a certain distance from life, a sort of scenic overlook from which to view life, perhaps that idea came from the word "position" in the first paragraph. In my lower middle-class background, even a teaching assistant had a position, not a job. A little more of this kind of thing, however, and the story will never be written.

Writers must remain, to some degree, not only ignorant of what they are going to do but what they are doing. Mary Peterson just wrote me about her novel, "I need to write it before I can think about it, write it too fast for thought." Writers have to protect their ignorance, and it is not easy to remain ignorant, particularly in an English department. That may be one reason we have deemphasized the experience of discovery in writing.

Discovery, however, can be a frightening process. The terror of the empty page is real, because you simply do not know what you are going to say before you say it or if indeed you will have anything to say. I observe this process most dramatically at those times when I dictate early drafts of nonfiction to my wife, who types it on the typewriter. We have done this for years, and yet rather regularly she asks me to repeat what I have said or tell her what I am going to say so that she can punctuate. I don't think, after many books and many years, that she really believes me when I claim I can't remember what I've just said or that I don't know what I'm going to say next.

This process is even more frightening when you engage in the forms of writing that take you inside yourself. "There's not any more dangerous occupation in the world," says James Dickey of poetry. "The mortality rate is very, very high. Paul Valéry once said, 'one should never go into the self except armed to the teeth.' That's true. The kind of poets we're talking about—Berryman, Crane, Dylan Thomas—have created something against which they have no immunity and which they can not control."

Finally, many expert readers who teach English, and therefore writing, are ignorant of the process of discovery because it is not, and should not be, apparent in a finished work. After a building is

finished, the flimsy scaffolding is taken away. Our profession's normal obsession with product rather than process leads us towards dangerous misconceptions about the writing process. I believe increasingly that the process of discovery, of using language to find out what you are going to say, is a key part of the writing process. In light of this I would like to reexamine the revision process.

The Two Principal Forms of Revision

The more I explore the revision process as a researcher and the more I experience it as a writer, the more convinced I am that there are two principal and quite separate editorial acts involved in revision.

Internal revision. Under this term, I include everything writers do to discover and develop what they have to say, beginning with the reading of a completed first draft. They read to discover where their content, form, language, and voice have led them. They use language, structure, and information to find out what they have to say or hope to say. The audience is one person: the writer.

External revision. This is what writers do to communicate what they have found they have written to another audience. It is editing and proofreading and much more. Writers now pay attention to the conventions of form and language, mechanics, and style. They eye their audience and may choose to appeal to it. They read as an outsider, and it is significant that such terms as *polish* are used by professionals: they dramatize the fact that the writer at this stage in the process may, appropriately, be concerned with exterior appearance.

Most writers spend more time, *much* more time, on internal revision than external revision. Yet most texts emphasize the least part of the process, the mechanical changes involved in the etiquette of writing, the superficial aspects of preparing a manuscript to be read, and pass over the process of internal revision. It's worth noting that it is unlikely intelligent choices in the editing process can be made unless writers thoroughly understand what they have said through internal revision.

Although I believe external revision has not been explored adequately or imaginatively, it has been explored. I shall concentrate on attempting to describe internal revision, suggesting opportunities for research, and indicating some implications for the teaching of writing.

The Process of Internal Revision

After the writer has completed the first draft, the writer moves toward the center of the writing process. E. M. Forster says, "The act of writing inspires me," and Valéry talks of "the inspiration of the writing desk." The writer may be closer to the scientist than to the critic at this point. Each piece of writing is an experiment. Robert Penn Warren says, "All writing that is any good *is* experimental: that is, it's a way of seeing what is possible."

Some pieces of writing come easily, without a great deal of internal revision. The experience is rare for most writers, however, and it usually comes after a lifetime of discipline, or sometimes after a long night of work, as it did when Robert Frost wrote "Stopping by Woods on a Snowy Evening." The important thing to understand is that the work that reads the most easily is often the product of what appears to be drudgery. Theodore Roethke wisely points out that "you will come to know how, by working slowly, to be spontaneous."

I have a relatively short 7-part poem of which there are 185 or more versions written over the past 2 years. I am no Roethke, but I have found it important to share with my students in my seminar on the teaching of writing a bit of the work which will never appear in public. I think they are impressed with how badly I write, with how many false starts and illiterate accidents it took for me to move forward towards some understanding of the climate in a tenement in which I lived as an only child, surrounded by a paralyzed grandmother and two rather childlike parents. The important thing for my students to see is that each word changed, each line crossed out, each space left on the page is an attempt to understand, to remember what I did not know I remembered.

During the process of internal revision, writers are not concerned with correctness in any exterior sense. They read what they have written so that they can deal with the questions of subject, of adequate information, of structure, of form, of language. They move from a revision of the entire piece down to the page, the paragraph, the sentence, the line, the phrase, the word. And then, because each word may give off an explosion of meaning, they move out from the word to the phrase, the line, the sentence, the paragraph, the page, the piece. Writers move in close and then move out to visualize the entire piece. Again and again and again. As Donald Hall says, "The attitude to cultivate from the start is that revision is a way of life."

Discovery and Internal Revision

The concept of internal revision is new to me. This essay has given

me the impetus to explore this area of the writing process. The further I explore the more tentative my conclusions. This chapter is, indeed, as I believe it was meant to be, a call for research, not a report of research. There are many things I do not understand as I experience and examine the process of internal revision. But in addition to my normal researches, I am part of a faculty which includes seven publishing writers, as well as many publishing scholars and critics. We share our work in process, and I have the advantage of seeing them discover what they have to say. I also see the work of graduate students in our writing program, many of whom are already publishing. And I watch the writing of students who are undergraduates at the university, in high school, in middle school, and in elementary school. And I think I can perceive four important aspects of discovery in the process of internal revision.

The first involves *content*. I think we forget that writers in all forms, even poetry, especially poetry, write with information. As English professors and linguistic researchers, we may concentrate on stylistic differences, forgetting that the writer engaged in the process of internal revision is looking through the word—or beyond the word or behind the word—for the information the word will symbolize. Sitting at a desk, pausing, staring out the window, the writer does not see some great thesaurus in the sky; the writer sees a character walking or hears a character speaking, sees a pattern of statistics which may lead toward a conclusion. Writers can't write nothing; they must have an abundance of information. During the process of internal revision, they gather new information or return to their inventory of information and draw on it. They discover what they have to say by relating pieces of specific information to other bits of information and use words to symbolize and connect that information.

This naturally leads to the discoveries related to *form and structure*. We all know Archibald MacLeish said that a poem should not mean but be, but what we do not always understand is that the being may be the meaning. Form is meaning, or a kind of meaning. The story that has a beginning, a middle, and an end implies that life has a beginning, a middle, and an end; exposition implies that things can be explained; argument implies the possibility of rational persuasion. As writers bring order to chaos, the order brings the writers toward meaning.

Third, *language* itself leads writers to meaning. During the process of internal revision (what some writers might call eternal revision), they reject words, choose new words, bring words together, switch their order around to discover what they are saying. "I work with

language," says Bernard Malamud, "I love the flowers of afterthought."

Finally, I believe there is a fourth area, quite separate from content, form, or language, which is harder to define but may be as important as the other sources of discovery. That is what we call *voice*. I think voice, the way in which writers hear what they have to say, hear their point of view towards the subject, their authority, their distance from the subject, is an extremely significant form of internal revision.

We should realize that there may be fewer discoveries in form and voice as a writer repeats a subject or continues work in a genre which he or she has explored earlier and become proficient with. This lack of discovery—this excessive professionalism or slickness, the absence of discovery—is the greatest fear of mature, successful writers. They may know too much too early in the writing process.

Questions Looking for Questioners

Speculations about the writing process are fun to propose and entertaining to consider, but we will not understand the writing process unless we employ all of the methods and tools of modern research. Hypotheses suggested, such as the existence of an identifiable process of internal revision, must be subjected to tough, skeptical investigation. We must ask uncomfortable, demanding questions of the writing process. We will certainly not get the answers we expect—many of our pet theories will be destroyed—but the answers will bring new and better questions. Research into the writing process will eventually produce an understanding of how people write, which will have a profound effect on our educational procedures. We now attempt to teach a writing process we do not understand; research may allow us to teach what we understand.

The following are some of the questions researchers must ask:

1. How can the process of internal revision be described? The actual process of internal revision should be described in precise terms so we can understand the steps taken by a broad range of professional and student writers as they use language to discover and clarify the meaning of what they are writing. The process should be broken down and analyzed, defined and documented, so we can begin to understand what happens during internal revision.
2. What attitudes do effective writers bring to the task of internal revision? Attitude precedes and predetermines skill.

Too often we attempt to teach skills and fail because we have not taught the attitudes which make the skill logical and obvious. It is important to know the attitude of effective revisors (or is it revisionists?) when they come to their own piece of writing. Do they accept the process of revision as a normal part of the writing process, or do they see it as punishment? Do writers expect their understanding of what they are saying to change as they write?

3. How do writers read their own copy? Writers perform a special, significant kind of reading when they read their own writing in process. Writers must achieve a detachment from their work that allows them to see what is on the page, not what they hoped will be on the page. They also must read with an eye to alternatives in content, form, structure, voice, and language. How do they read their own page and visualize the potential choices which may lead to a clarified meaning? How do they listen to the page to hear what is being said and what might be said?
4. What skills does the writer employ during the process of internal revision? There seem to be four distinct areas or types of internal revision. The first involves content, the collection and development of the raw material, the information with which the writer writes. The next is the form or structure of the writing itself. The last two are the voice and the language employed in the clarification of meaning. It is likely that there are overlapping but identifiable skills employed by the writer in each of these areas. The skills need to be observed and described. One unexplored skill which might help our understanding of internal revision is the writer's use of memory. There seem to be two significant forms of memory employed by the writer: one is the way in which writing unlocks information stored in the brain; the other is the memory of what the writer has previously written within the piece, which influences each choice during the process of internal revision. Another skill might come from the fact some writers say they write with verbs, especially during the process of revision. It might be fruitful to examine how writers use verbs as the fulcrum of meaning.
5. What developmental stages are significant to an understanding of the process of internal revision? Applying our knowledge of how people react to their own world at different ages may help us understand the process of internal revision.

There may be significant differences because of sex, levels of intelligence, or social-economic background. Our preconceptions about student willingness to revise may be wrong. Teachers who see rewriting as punishment may believe that students will not rewrite at certain levels of development and may, because of this conviction, discourage rewriting. In fact, their students may wish to revise, to explore the same subject in draft after draft, if they are given the opportunity. There may be a significant relationship between length and revision. Students may want to write longer than their teachers think they can, and the longer pieces students write may have a greater potential for exploration than shorter pieces. There are also indications that considerable familiarity with a subject, experience with a form, and confidence in a voice may increase discovery.

6. What new knowledge may help us understand the process of internal revision? There are significant new discoveries in brain research, for example, which may provide major breakthroughs in how writers write. The most significant article pointing out this new territory is Janet Emig's "The Biology of Writing: Another View of the Process." We also need to apply the latest findings of linguistic studies, rhetorical research, and learning theory to the process of internal revision. We must draw on as many fields as possible to attempt to understand the writing process. What can the teachers of foreign languages teach us? What can we learn from those who are studying the process of creativity in art, in music, in science? What can we learn from those who study the language of mathematics and from those who design and use computers, which employ the language of mathematics to discover meaning in information?
7. What writing tools, habits, environments, or schedules influence the process of internal revision? Most writers scorn the interviewer's questions about what time of day they write and whether they use pen or typewriter. They feel this is trivia, and it may be, but it also may be significant trivia, for writers among themselves often seem obsessed by such matters. Writers are craftsmen who are greatly concerned with their tools—the texture, weight, size, and tint of paper; the flow of ink and its color; the design of the pen, its feel, and the breadth of its point. Most writers have superstitions about their favorite writing tools, and most of them vary their tools at

different stages of the writing process. I write early drafts of poems in longhand (Mont Blanc fountain pen, thin point, permanent black ink, eye-ease green legal ruled paper), but in a stage central to the process of internal revision, I shift to a typewriter so I can see the poem in print. I find that most poets work in this way. Most writers also find certain environments, quiet or noisy, secluded or public, stimulate the writing process. (I hide in a secluded office these days, but I'd work best in a busy restaurant if I could afford to rent a table and if I could be anonymous—an impossibility in a small university town.) Writers usually are compulsive about the hour at which the work seems to go the best. (My present rule is at least 600 words before 9 a.m. every day.) Most writers seem to move towards the extremes of early morning or late at night, when they have the maximum energy or can work best without interruption, or can tap most easily into their subconscious. Writers have rituals or habits—reading or not reading what they have written or stopping in mid-sentence—which stimulate the flow of discovery through writing. These tricks of the trade may be important for students to know, and they may call for different learning styles or curriculum patterns than those normally imposed in school.

8. What subject areas, writing forms, or language patterns stimulate or discourage discovery of meaning through internal revision? We should observe writers at work on the traditionally most creative forms, such as poetry, but also on the less traditionally studied forms, such as technical writing, business letter writing, speech writing, news writing, and so on, to find out how these writers and the forms they use influence the process of discovery of meaning through language. The evidence we have is restricted to very few forms of writing. We need to extend this examination to all forms.

9. How do editors read writing and encourage improvement through the process of internal revision? Editors are highly specialized readers of writing in process who work closely with writers at each stage of the writing process. Yet, as far as I know, there have been no significant studies of how editors read copy, what they discover, and how they communicate with writers. This editing is not proofreading—it is the constructive examination of a draft with directions as to how further drafts may be developed. It should be obvious that editors are highly expert teachers and that they have a great

deal to tell us about the writing process and the teaching of that process. They must motivate and employ techniques of communication which will make criticism constructive, which will stimulate, not discourage, improvement in writing. Their knowledge, attitudes, and skills might be a significant contribution to the understanding of the writing process and the means by which it can be taught.

10. What curricula, teaching environments, and methods encourage the improvement of writing through the process of internal revision? There are increasing numbers of teachers at every level, from preschool through graduate school, who are helping their students learn to write by taking them through the experience of the writing process. We need to observe these teachers at work and see exactly what their students do while they are engaged in the process of internal revision.

Those are just a few of the questions which should be asked of the process of internal revision. Each question will, of course, lead to additional questions. Each answer will produce even more questions, and researchers bringing their own special knowledge to the task will develop new questions. This is an exciting prospect, for the best and most obvious questions about the writing process have, amazingly, not been asked or investigated. We have a frontier ready for exploration.

How We Can Research Such Questions

I can suggest a number of ways to investigate the essential questions of internal revision:

Bring researchers in the writing process closer together with linguists, rhetoricians, and brain or neuroresearchers in teams and seminars to focus their divergent disciplines on an understanding of the writing process.

Examine writers' manuscripts to discover from the evidence on the page how writers read and revise to clarify their meaning for themselves.

Make use of accounts of the writing process—writers' interviews, diaries, journals, letters, autobiographies—to see what writers say they are doing.

Sponsor accounts of writers at work. Encourage writers to keep journals of an evolving piece of work, together with manuscript pages, so that they might become more aware and make others

aware of the nature of their concern during the process of internal revision. (Many writers would refuse, of course, but some would not.)

Observe professional writers and editors at work, and interview them to see what they have done. Not many writers will stand still for this, but there may be some who would consent to be observed in a manner similar to the observation of students done by researchers such as Emig (1971) and Donald Graves (1975).

Collect and examine drafts of a number of versions of pieces of writing in many fields, not just examples of "creative writing" but examples of journalism, technical writing, scholarly writing. When I was an editor at *Time*, many copies of every single draft were typed, distributed, and I believe retained. A research project might collect and examine such drafts and perhaps interview the writers/editors who were producing them.

Observe students' writing and follow drafts evolving through the process of internal revision. Perhaps some students, for example, might be willing to read for revision or even revise using a scanner which shows how their eyes follow the text, where they stop and start.

Test the effectiveness of what we find out about the process of internal revision by having our students follow the examples of the writers who read and rewrite to discover what they have to say, and then see if the students' drafts define and refine a meaning more effectively than the early drafts.

These are just a few of the possible methods of researching internal revision. It seems clear, however, that the most productive method of exploring the writing process is the case study. We do not need extensive statistical surveys as much as we need close observation of a few writers and students doing the entire writing process by well-trained observers who follow their observations with intelligent, probing interviews. This method of investigation seems the one which will yield the basic data and concepts which will be tested and developed by other means of investigation.

The Implications for Teaching

If writers don't write what they know, but to learn what they may know, there may be significant implications for teaching, especially in the area of internal revision. Some of them are:

Stupid kids may not be stupid. Students classified as slow may simply have the illusion writers know what they are going to say before they say it. Since they do not know what they are going to write, they may be paralyzed and not write. Such students, once they understand how writers write, may be released from this paralysis. Some slow students may then appear less slow when their writing evolves through towards a subject.

Many articulate, verbal, glib students who are overrewarded for first-draft writing may be released from the prison of praise and high grades and encouraged to write much better than they ever have before.

Unmotivated students may be motivated to write when they find writing an adventure. In my teaching of "remedial" students, the exploration of a subject through many drafts is the single most significant motivating factor. Teachers constantly make the judgment that their least motivated students will not write many drafts, when in fact they are often the students who most quickly write many drafts once they experience the excitement of exploring a subject with language.

An understanding of the process of prevision, vision, and revision may result in the redesign of writing units so that students spend more time on prevision, far less time on vision, and much more time on revision. Students will have a greater opportunity in such units to discover an area they want to explore and more time to explore it.

Research into the writing process may reveal the process of writing to teachers so they will allow their students to experience it.

Finally, an understanding of the writing process may give literature teachers a new appreciation and understanding of the product we call literature. They may be able to read in a way which will help them discover the full implications of what the writer has done and is doing on the page.

Most of these implications could and should be evaluated by educational researchers. The teaching of writing certainly needs far more professional inquiry than the subjective accounts, anecdotes from the trenches which so many of us, myself included, have produced in the past.

The new interest in the process of writing, rather than the product of writing, opens the door for important and interesting research

which can employ all of the tools of intelligent investigation. It is a job which needs to be done. The process of writing—of using language to discover meaning and communicate it—is a significant human act. The better we understand how people write—how people think—the better we may be able to write and to teach writing.

Appendix: Writers on Prevision, Vision, and Revision

Edward Albee: Writing has got to be an act of discovery. . . . I write to find out what I'm thinking about.

W. H. Auden: Language is the mother, not the handmaiden, of thought; words will tell you things you never thought or felt before.

James Baldwin: You go into a book and you're in the dark, really. You go in with a certain fear and trembling. You know one thing. You know you will not be the same person when this voyage is over. But you don't know what's going to happen to you between getting on the boat and stepping off.

Robert Bolt: Writing a play is thinking, not thinking about thinking.

Truman Capote: If there is no mystery, for the artist, to solve inside of his art, then there's no point in it. . . . for me, every act of art is the act of solving a mystery.

Frank Conroy: Most often I come to an understanding of what I am writing about as I write it (like the lady who doesn't know what she thinks until she says it).

John Dos Passos: Curiosity urges you on—the driving force.

Alan Dugan: When I'm successful, I find the poem will come out saying something that I didn't previously know, believe, or had intellectually agreed with.

Robert Duncan: If I write what you know, I bore you; if I write what I know, I bore myself, therefore I write what I don't know.

William Faulkner: It begins with a character, usually, and once he stands up on his feet and begins to move, all I do is trot along behind him with a paper and pencil trying to keep up long enough to put down what he says and does.

Gabriel Fielding: Writing to me is a voyage, an odyssey, a discovery, because I'm never certain of precisely what I will find.

E. M. Forster: How do I know what I think until I see what I say?

Robert Frost: For me the initial delight is in the surprise of remembering something I didn't know I knew. . . . I have never started a poem yet whose end I knew. Writing a poem is discovering.

Christopher Fry: My trouble is I'm the sort of writer who only finds out what he's getting at by the time he's got to the end of it.

Rumer Godden: Of course one never knows in draft if it's going to turn out, even with my age and experience.

Joanne Greenberg: Your writing is trying to tell you something. Just lend an ear.

Graham Greene: The novel is an unknown man and I have to find him . . . .

Nancy Hale: Many an author will speak of writing, in his best work, more than he actually knows.

Robert Hayden: As you continue writing and rewriting, you begin to see possibilities you hadn't seen before. Writing a poem is always a process of discovery.

Shirley Hazzard: I think that one is constantly startled by the things that appear before you on the page when you're writing.

George V. Higgins: I have no idea what I'll say when I start a novel. I work fast so I can see how it will come out.

Cecelia Holland: One of the reasons a writer writes, I think, is that his stories reveal so much he never thought he knew.

William Inge: I don't start a novel or a play saying, "I'll write about such and such." I start with an idea and then find out what I'm writing about.

Galway Kinnell: I start off but I don't know where I'm going; I try this avenue and that avenue, that turns out to be a dead end, this is a dead end, and so on. The search takes a long time and I have to back-track often.

Stanley Kunitz: For me the poem is always something to be discovered.

Margaret Laurence: Each novel is a kind of voyage of discovery.

Denise Levertov: Writing poetry is a process of discovery . . . you can smell the poem before you see it. . . . Like some animal.

C. Day Lewis: First, I do not sit down at my desk to put into verse something that is already clear in my mind. If it were clear in my mind, I should have no incentive or need to write about it. . . . we do not write in order to be understood; we write in order to understand.

Bernard Malamud: A writer has to surprise himself to be worth reading.

William Matthews: The easiest way for me to lose interest is to know too much of what I want to say before I begin.

Mary McCarthy: Every short story, at least for me, is a little act of discovery. A cluster of details presents itself to my scrutiny, like a mystery that I will understand in the course of writing or sometimes not fully until afterward. . . . a story that you do not learn something from while you are writing it, that does not illuminate something for you, is dead, finished before you started it.

Arthur Miller: I'm discovering it, making up my own story. I think at the typewriter.

Henry Miller: Writing, like life itself, is a voyage of discovery.

Alberto Moravia: One writes a novel in order to know why one writes it.

Wright Morris: The language leads, and we continue to follow where it leads.

Flannery O'Connor: The only way, I think, to learn to write short stories is to write them, and then try to discover what you have done.

Lawrence Osgood: Writing is like exploring . . . as an explorer makes maps of the country he has explored, so a writer's works are maps of the country he has explored.

Jules Renard: The impulse of the pen. Left alone, thought goes as it will. As it follows the pen, it loses its freedom. It wants to go one way, the pen another. It is like a blind man led astray by his cane, and what I came to write is no longer what I wished to write.

Adrienne Rich: Poems are like dreams; you put into them what you don't know you know.

Charles Simic: You never know when you begin a poem what it has in store for you.

William Stafford: I don't see writing as a communication of something already discovered, as "truths" already known. Rather, I see writing as a job of experiment. It's like any discovery job; you don't know what's going to happen until you try it.

Mark Strand: What I want to do in a poem is discover what it is that I have to say.

John Updike: Writing and rewriting are a constant search for what one is saying.

Kurt Vonnegut: It's like watching a teletype machine in a newspaper office to see what comes out.

David Wagoner: For me, writing poetry is a series of bewildering discoveries, a search for something that remains largely unknown even when you find it.

Robert Penn Warren: A poem is an exploration not a working out of a theme.

Thomas Williams: A writer keeps surprising himself . . . he doesn't know what he is saying until he sees it on the page.

8 Research Strategies for the Study of Revision Processes in Writing Poetry

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Given a piece of paper and a pencil or charcoal, in a very few minutes it becomes obvious even to the most ardent beginner that he or she knows nothing about drawing. The novice artist readily admits there is much to be learned about the medium. On the other hand, the beginning writer of poetry does not so readily adopt such humility. And yet one suspects that among the most expert and significant writers of poetry there is a critical set towards one's own work, an attitude of "there is much to be learned" in each piece of writing. One suspects that a distinguishing feature of those poets who become masters or innovators in their craft is the drive that sustains critical judgment and revision of a piece of work until it approaches whatever the work is intended to be or is in the process of becoming.

But why study the revision process? James Dickey suggests that the poetic process is not known or knowable (at least the more delicate parts of it) and maybe shouldn't be, but his own analytic writing illuminates parts of the process. Among educators, there is some speculation that skills and interest in imaginative writing decline through the school years for large numbers of students, but very little data is available concerning the nature of writing processes or their course of development over the school years. It is no doubt generally believed that one cannot assess the complex skills involved in imaginative writing. But student writers and their work are regularly assessed for various purposes, and student skills and school programs are routinely evaluated in order to make program decisions.

My own view is that it is impossible to assess, elicit, or operationalize *completely* any part of the complex process of writing a poem. All one can do is arbitrarily isolate parts of the process and examine them. The pursuit of a description of revision processes, however

idiosyncratic or unfathomable they may be, might uncover new knowledge or confirm conventional wisdom. In either case, the very complexity of the task may itself cause us to understand more about the learning, performance, and assessment of this critical part of the writing process. To help researchers explore this complexity, I shall propose a set of research strategies that have promise both for obtaining descriptions of revision processes and for generating some data-based hypotheses concerning (1) the nature of revision processes; (2) the developmental stages in revision abilities; and (3) the ways writers move from one developmental stage to another.

What Is the Revision Process?

Revision in the writing of poetry is *not* solely editing and polishing after a work is largely finished. It occurs prior to and throughout the writing of a poem until completion or abandonment of the work. Revision is both the *discrimination* or sensing of something in a work that does not match what the poet intends or what the poem itself suggests and the *synthesis* that brings the writing closer to what is intended or suggests the way that this might be done. Revision is not "making a poem better," it is making the poem more consonant or congruent with one's image of what the piece of writing is intended to accomplish. A poem is finished when that congruency is accomplished, though perhaps more often the poem is abandoned before that goal is reached. One formulation of the process of achieving congruency is represented in Figure 1. There is, of course, much still to be done in specifying model elements, processes, and relationships. Yet such a formulation can guide the development and validation of assessment procedures and intervention strategies for the study of writing-as-revision. A writer is seen as one for whom *preconceptions* (concerning style or what the writer intends for a work to accomplish) guide preliminary work (written, spoken, sensed, or thought) and then provide the criteria against which one makes *discriminations* as to what the work does or what it suggests. *Dissonance* —lack of congruence between what the work does and what the writer feels it should do—may then follow with or without associated *tension*. The tension may be a concern by the writer that the work *does do* what he or she intended, but that one is now dissatisfied with the intention and wants to change the preconceptions. Or the tension may be a concern that the work does *not do* what the writer intended, and one now wants to change the work. The writer may resolve this tension by *reconceptions* or re-seeing. The re-seeing or

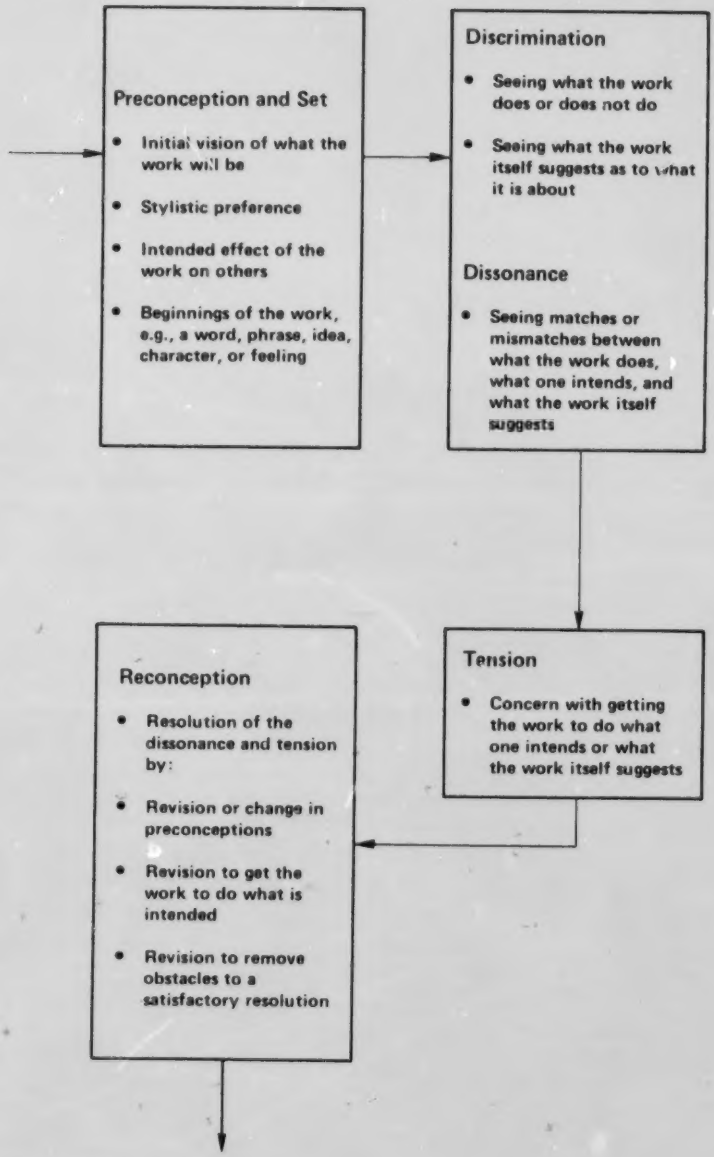
Preconception and Set
• Initial vision of what the work will be
• Stylistic preference
• Intended effect of the work on others
• Beginnings of the work, e.g., a word, phrase, idea, character, or feeling
Discrimination
• Seeing what the work does or does not do
• Seeing what the work itself suggests as to what it is about
Dissonance
• Seeing matches or mismatches between what the work does, what one intends, and what the work itself suggests
Tension
• Concern with getting the work to do what one intends or what the work itself suggests
Reconception
• Resolution of the dissonance and tension by:
• Revision or change in preconceptions
• Revision to get the work to do what is intended
• Revision to remove obstacles to a satisfactory resolution

Fig. 1. A model of the process of writing-as-revision.

revisions may have to do with changing preconceptions concerning style (or other matters), seeing how one might change the work to make it congruent with one's inner vision, or seeing how one may remove obstacles to attempting a resolution. There is no implication here that this is all a conscious process; that the elements described flow in a fixed sequence; or that one *will* see dissonance, feel tension, or try to resolve the tension by matching one's intention with one's perception of what the work does. Indeed, "obstacles to revision" are possible at any point: preconceptions may be sustained that limit as well as help; discrimination as to what a work does may be limited; dissonance may not be sensed; tension may not be felt; and reconception may be avoided.

This view of the revision process suggests measures of performance such as the writer's range of preconceptions, sets, or stylistic biases; the intensity of tension, its frequency, or its duration; the range of elements that may produce "dissonance"; and the persistence and variety of ways in which one attempts to resolve the dissonance. It also suggests obstacles to be removed such as no perception of dissonance, no tension from dissonance because of audience approval, avoidance of perception of dissonance and tension, a narrow range of stylistic preferences or discriminations against which one may judge one's own work, or limited strategies for re-seeing the work when dissonance *is* perceived and tension *is* felt. Such obstacles suggest that the development of a writer must take place over many years and that the understanding of writing as revision is not easily captured in a one-time brief assessment.

This conceptualization of the revision process does not imply that there is only one process or set of processes shared by all writers. A description of the process would no doubt demonstrate the nature and extent of diversity in revision processes both within a writer and between writers, yet idiosyncratic descriptions may well lead to the discovery of commonalities. The elements of the revision process outlined will, of course, focus the investigation on certain questions. It is important, however, that the methods of investigation leave open the possibility of discovering diversity in revision processes both within a poet and between poets.

Theoretical Pluralism

The probability of representing diverse revision processes increases with the diversity of theoretical views brought to bear on the subject and with the conflicting or overlapping findings they generate. The multiple viewpoints of researchers from different disciplines produce

a happy diversity of variables in the creative process. Starting with a psychodynamic orientation, one researcher (Rothenberg, 1970) looked for commonalities in the nature of inspiration and insight in the creative process of writing poetry. His hypothesis was that the poet starts by unearthing problems which are aesthetic metaphors for personal conflicts (a mood, visual image, word, or phrase). The problem is sometimes difficult, tension-arousing, and anxiety-provoking, as evidenced by the poet's interrupting other activities to jot down words or do other work on the poem. During the writing of the poem, there are occasions of feverish activity and sudden insights as to what the poem is really saying, coupled with some relief of tension. If anxiety leads to a piece of work that allows later recognition of its source, this may produce pleasurable anticipation and gratification that lead poets to court the process of attaining these states again and again.

Another investigator (Emig, 1971), influenced by educational considerations (i.e., what and how to teach), derived a comprehensive outline of ten dimensions of the composing process from analysis of case studies of sixteen and seventeen year olds. The major categories of the composing process identified were nature of stimulus, prewriting, planning, starting, composing aloud, reformulation, stopping, contemplation of product, and seeming teacher influence on the piece. It is clear that revision (or reformulation), though only one dimension in Emig's outline, occurs throughout the entire composition process. The influence of an educational frame of reference is apparent in both the methodology of the study (students were asked to recall prewriting and planning, evaluate teaching of writing experienced, recall writing done in and out of school) and in the findings (though categories were evolved inductively, they reflect educational concerns).

Some researchers focusing on the poet's audience have come up with typical reader responses and sources of difficulty that have implications for poetic revision (Richards, 1929; Squire, 1964; Terry, 1974). Thus, in judging a piece of literature, the reader is influenced by technical presuppositions (e.g., concerning meter or metaphor) and sentimentality (e.g., a piece of writing should have a happy ending). Since the writer rereads a piece of work in the process of revision, these investigations of reader response may be useful in suggesting categories for revision. This literature is also useful for suggesting audience response variables that might influence the writer or that might be taken into account by the writer trying to reach a specific audience.

The poet writing about his or her own process brings special

insights missed by other viewpoints. Thus, Henry Taylor (1974, pp. 59–68) refers to the poem, rather than his own intentions, as determining the changes he makes in rewriting. Chad Walsh (1970, chap. 11), in a chapter titled "Poets at Work," describes a process in which "gradually . . . in the very [act] of setting words down . . . [the poet] discovers what it is that he (or the poem) wishes to express. At this point he is ready to . . . begin rewriting the poem on the basis of his clearer understanding of it" (p. 147).

The linguistic analysis of poetry, or "stylistics" (e.g., Sedelow, 1970; Sedelow, Sedelow, & Ruggles, 1964; Russell, 1969; Bailey & Burton, 1968; Thompson & Weiner, 1972), leads to quite different categories of poetic elements than the more comprehensive work by Hildick (1965) which takes into account "intentions" of the writer. Russell identifies "distension" as the poetic pressure of stretching a linguistic relationship so that it confers a linguistic effect upon speech. The introductory lines of "A Refusal to Mourn the Death, by Fire, of a Child in London" provide a good example:

> Never until the mankind making
> Bird beast and flower
> Fathering and all humbling darkness

The intrusion of an entire adverbial construction between "the . . . darkness" puts the construction under heavy pressure to perform its English language function. Work on computer stylistics (the use of computers for quantitatively rigorous studies of style in natural language) suffers currently from a deficiency in the discovery and rigorous definition of analytical categories. However, this kind of work has potential for the specification of categories of poetic language that would be useful in the study of revision processes.

And if one were to approach the study of revision from the frame of reference of the technology of behavior analysis and training, one would look for instances of how the poet is influenced by or makes use of feedback (its immediacy, specificity, relevance, sources, ways of initiating); what consequences of writing reinforce bad habits or terminate good ones; and what other habits or problems of resources interfere with writing. What I am illustrating is simply that in the search for the idiosyncratic processes of revision, a more complete account is likely when one welcomes diversity in theoretical notions or frames of reference.

Criteria for Selecting Research Strategies

The conception of revision processes outlined earlier and the assump-

tions stated there concerning the value of a variety of theoretical frames of reference influence the selection of research strategies, the kinds of questions asked, the kinds of data seen as relevant, data-gathering procedures, and procedures for data analysis and interpretation. In this section, some of those assumptions will show up again. But before making specific suggestions for research, I want to lay out briefly my biases concerning what criteria should guide the selection of research strategies.

Methodological pluralism. Researchers should consider the use of a combination of research methodologies. Emig (1971) outlines the variety and limitations of data sources for disciplined inquiry into writing processes: the accounts of established writers concerning their own work, accounts by others concerning the work of writers, directives concerning the writing process by writer-teachers, theoretical statements, and empirical research. The conflicting data generated by these sources are an excellent starting point for further research. Likewise, document analysis (revision manuscripts of poets), observation-interview studies of poets teaching (judging poetry of novices), observation-interview studies of poets rewriting, studies of audience (reader) response, and longitudinal studies all yield different kinds of information. The value of planned pluralism in methodology for generating hypotheses and uncovering more and richer descriptions of underlying processes is most apparent where the phenomena to be studied are so complex and resistant to analysis. At the same time, planning does not prevent useful accidents or happy mutations.

Sensitivity to complexity. A research methodology sensitive to the complexity of the revision process will focus initially on generating hypotheses rather than testing them and on identifying critical variables rather than manipulating them. Thus, descriptive studies will be more valuable than formal experiments or treatment studies unless the latter are combined with description in such a way as to uncover the conditions under which development, learning, or performance naturally occurs (Nesselroade & Reese, 1973). The need to consider behavior in all its complexity is well illustrated by Willems (1973) in a series of animal and human technological blunders. The story of a species of tit bird illustrates his position. Ornithologists studied the bird in its natural environment as a prelude to replicating that environment in a zoo. But the simulation appeared to lack some critical element. The parent birds repeatedly pushed the newly hatched young out of the nest to their death below. The ornithologist, finally convinced that adaptation to the zoo environment would not take place, returned to the natural habitat to observe. Two

elements stood out that appeared to account for the problem. First, in the natural environment whenever foreign inanimate matter fell into the nest, it was pushed out by the parent birds. Second, in the natural environment food was so widely scattered that the parent birds were gone a long time picking up food for the young; thus, whenever the parent birds returned, the young were chirping. In the zoo replication, food was easily accessible and the parent birds found the young asleep, like inanimate objects. Thus, even a careful description of a complex environment might miss some important element.

Strong hypotheses. It is not uncommon for researchers in instructional psychology and education to formulate and test hypotheses that are quite believable and contribute little to the account of what produces observed variability in human behavior. What is needed is "the far-out idea that seems to contradict existing knowledge" (Hebb, 1974, p. 78). If no experiment could refute one's hypothesis, one is not likely to add any new knowledge through one's investigation (Platt, 1964). Or put differently, what is needed are strong research hypotheses, strong in the sense of being far-out hunches that *might* account for variance in writing ability. They must also be strong in the sense that the hypothesis is tested by proposing counterhypotheses which are consecutively tested until many are excluded and those remaining are substantive. This suggests the need for long-term immersion in a field of study and careful analysis of a wide range of data to find the inconsistencies or regularities that may generate such hypotheses. I don't know what those hypotheses will turn out to be, but that is why the research methodologies I recommend emphasize pluralism of approach (to generate more variables, hypotheses, inconsistencies, and regularities) and emphasize description over hypothesis testing (to generate new hypotheses and more significant variables).

The Criterion Problem

One of the problems faced by the researcher dealing with poetry writing is the lack of an agreed upon criterion as to what "good poetry" is or indeed what poetry is. In the discussion of elements of the revision process, I spoke of a poem being finished when the work was seen by the writer as congruent with the intended goal. Obviously, for some writers the work is always experimental, always completely unsatisfactory, and thus never finished. For that work that is "finished" or abandoned, there are so many notions as to what a poem should do that no single criterion of excellence may easily be agreed upon. The researcher studying process may largely ignore the criterion question and simply study the process of revising whatever

it is that one calls poetry in the study; or the criterion may be decided separately for each study.

In my own research the poem is considered to be *for* an audience. That audience may be the poet or may include the poet. Shapiro (1953) writes, "A poem must do what it says. . . . If the poem says *I love you*, the words must act out this conviction and feeling in such a way as to convince a reader that the act of love is beyond question real" (pp. 43, 64–65). Or from Dickey (1964, pp. 9–10): "One thing is certain, if the reader does not, through the writing, gain a new, intimate, and vital perspective on his own life as a human being, there is no poem at all, or only a poem written by a collective entity called 'Modern Poetry, Period 1945–1960.' . . . What matters is that there be some real response to poems. . . ." And, of course, there is Dylan Thomas (1961): "Poetry is what in a poem makes me laugh or cry or yawn, what makes my toenails twinkle, what makes me want to do this or that or nothing. . . All that matters about poetry is the enjoyment of it however tragic it may be" (p. 53).

Procedurally, pinning down the criterion may involve a simple Q-sort or ranking (see Stephenson, 1953, for the procedure and Della-Piana, 1971, for an application to poetry ratings). But ultimately one must get thoroughly immersed in complex performances in order to come up with a measure that is significant (Della-Piana, 1974).

Suggested Studies

If I were to guess at what might be a highly significant direction for research on revision processes, it would be the pursuit of one question: *What are the varieties of ways and courses of development by which the poet removes the obstacles to revision?* I would of course study the obstacles to revision throughout the writing of the poem. Initial obstacles are preconceptions which can be hindrances to seeing differently and to seeing what a poem does; following them are the obstacles of the appreciative audience (including the poet) which limit one's vision of what a poem can do and one's objectivity in looking at what a given poem does. How do poets remove such obstacles? What are the courses of development over time of the ability to remove the obstacles? Getting specific about these questions is not a simple matter. Try your hand at it. Remember, "Always the more beautiful answer who asks a more beautiful question."

In the remainder of this chapter, I will propose some research strategies for the study of revision processes in writing poems. My

focus is on some of the key manifestations of obstacles to revision and on the ways in which poets remove these obstacles. I will discuss two data sources for getting at revision processes: available documents and structured observations. Specific questions or hypotheses and illustrations of the kinds of research procedures that might prove fruitful are presented in connection with each data source.

Available Documents as Data Sources

Certain kinds of available documents will provide data on obstacles to revision and on how poets remove obstacles. They include autobiography and biography, poetic criticism, poets or teachers on "the craft," accounts by poets of their process in writing or revising a poem, revision manuscripts, and research reports. There are, of course, other categories of available documents, but these serve to illustrate the broad range of available data and the kinds of studies that may be carried out with this data. Examination of data in a wide range of available documents can generate definitions of possibly significant obstacles to revision and hunches as to how the writers remove obstacles or fixate upon them. Inconsistencies in data within a source or between sources can stimulate the generation of strong hypotheses. Some of the detailed descriptive data, though gathered or recorded for other reasons, can easily be used in the study of revision. The summaries that follow are intended simply to illustrate the richness and variety of these data sources.

Autobiography and Biography

Sartre (1964), in an autobiographical account of his early years, tells how he first wrote for audiences of family and friends in the home; losing them, his writing became clandestine, less audience bound, more for his own pleasure. He began experimenting; once more, however, he was drawn to an audience and by listening lost his fabulous illusions. Finally he decided one writes for one's neighbors or God, and he chose God. He thus did not write to please and became clandestine and more experimental again.

Dickey (1970) tells of changes in taste over time. He liked Stephen Spender but later found him stylistically unimportant. But Spender led him to Rilke, who influenced his outlook. George Barker and Dylan Thomas gave him "a sense of style." William Hunter (a university teacher) encouraged him but also once said, "Dickey, that play went right by me." Monroe Spears helped him to be less apocalyptic. When writing for Coca-Cola, "I was in it for the

money. . . . The integrity came at night. . . . " Ashman in New Orleans was the first to comment *in print* about Dickey writing a long (and Dickey says "confused") poem in *Poetry* magazine: "He wrote that there was a new breed of poets emerging; and some of them were simple, and some of them were complicated, but no one had the right to be as complicated as James Dickey!" That had an effect: "Well, I slowly worked away from the extremely allusive kind of poetry I had been trying to write, doubtless very much under the influence, at several removes, of Pound and Eliot, as well as William Empson. . . . I wanted to find a way to be simple without being thin. This idea evolved over quite a long period of time. . . . to an extremely individual kind of simplicity. . . . something for every level of the mind . . . accessible to a child and also [giving] college professors . . . [and] critics something . . . they haven't had much of recently, or indeed ever. . . . I also wanted to see if I could work with narrative elements in new and maybe peculiar ways. I liked narrative." Dickey refers also to the conflict between teaching and writing (energies for one diminish when doing the other). He speaks of one of Doc Watson's best and fastest flat-picking pieces called "Nothing to It" as an example of what he strives for in poetry: "the ability to do a thing thoughtlessly and do it right." He speaks of the steady involvement with the materials of his art and the assumption that at the beginning of the writing of a poem, the first fifty ways I try it are all going to be wrong"; he also speaks of writing so that the passion in a poem is built up in such a way that it is "conserved and always available." Some attention is given to specific discriminations as to what needs revision. Thus, in the poem "The Firebombing," originally he had a section out of a technical manual on radar and on speeds at which wheels and flaps let down: " . . . and then it occurred to me that, to anybody who hadn't flown, it would be very boring. So I made it a more impressionistic version of a combat flight and thought that if I did it this way it would have greater impact. . . . " On the subject of the obstacle of outside pressure, he says that "public pressure or the pressure of literary groups on poets to write about certain subjects rather than other subjects is the very death of the poetic impulse. . . . " Yet he is very much concerned with communication: "I wanted immediacy, the effect of spontaneity, and reader involvement more than anything else."

For biographical accounts of revision processes of poets including Housman, Hopkins, Eliot, Blake, Dickinson, Poe, Wordsworth, Keats, Tennyson, Rilke, Spender, and others, see Bartlett (1951). The above discussion does not, of course, exhaust the kind of data available in

autobiography or biography. But it is clear that from such data one may generate hypotheses concerning obstacles to revision and the developmental stages in ways of coping with obstacles.

Poets on Their Own Process

Though autobiography often includes accounts of revisions, there is a special literature in which poets describe in detail how particular poems were revised. Ghiselin (1952) and Taylor (1974) give quite detailed personal accounts. Taylor notes that another poet, after hearing the first draft reading of one of his poems, advised him to "keep the poem tight . . . [and] it should be a Petrarchan sonnet." This influenced his revisions, but eventually the sonnet form was found wanting because the background information necessary to the poem required more than fourteen lines. Taylor describes a variety of changes in the poem and exactly what appeared to make the earlier versions discriminative for revision, including such things as relieve the monotony of the meter; discomfort with the word *upon* when it is simply an iambic substitute for *on*; obtrusiveness of internal rhyme in this particular case because it emphasized the melodramatic quality of the poem; get rid of the archaic "behold"; get closer to the meaning intended (e.g., *who* made it too specific when he intended *anyone*, and the story did not seem far enough in the past).

Revision Manuscripts of Poets

There are many available manuscripts of poets, such as those in the impressive poetry collection of the Lockwood Memorial Library at the State University of New York at Buffalo. The Lockwood curator and staff are genuinely helpful to researchers. These manuscripts include successive revisions of poems as well as versions of critical essays and letters, published and unpublished. Works of William Carlos Williams, James Joyce, Carl Sandburg, Karl Shapiro, David Ignatow, Stephen Spender, and many others are available for examination by serious researchers. The manuscripts are not easy reading. Some are clearly written, even typed with successive versions of a poem retyped with notes by the poet. Others are collected as they were written with revision written over revision. Illustrations of this kind of data source are presented in a later section together with suggested procedures for analysis. For an example of the kind of analysis some poets and critics have made of materials in the Lockwood collection, see Arnheim, Auden, Shapiro, and Stauffer (1948) and Walsh (1970, pp. 134–152).

Poets and Teachers on Poetry

The literature of poetic criticism and of the craft of writing and teaching provides another body of material already available for analysis. A few illustrations will give the flavor of this data source. Shapiro (1953) comments, "It is difficult to imagine how the next true poet will escape all the masters lying in wait. . . . [avoid] indoctrination with false mythos of culture heroism . . . [and] destroy the religion of specialization. . . . The new poet is always the one who outwits the guardians of the prevalent systems—and mostly because he is not even aware of their existence" (pp. 71–72). Spender (1952) writes, "Every serious writer is really concerned with reputation and not with success . . . every writer is secretly writing for someone, probably for a parent or teacher who did not believe him in childhood . . . gradually one realizes that there is always this someone who will not like one's work" (p. 125). Dickey (1964) charges that "most of our contemporary poets are writing out into a climate of poetic officialdom, or pre-tested approval, based largely on the principles which the New Criticism has espoused, and on the opinions of those who count in modern letters" (p. 10).

With the support of the Teachers and Writers Collaborative, a volume (Brown, Hoffman, Kushner, Lopate, & Murphy, 1972) of teaching suggestions coming largely from poets teaching in the schools has been published. And the books by Peter Elbow (1973) and Walsh (1970) are also rich in teaching suggestions that include much material relevant to revision processes and removing obstacles to revision. Ciardi (1963) treats "what every writer must learn" in a way directly bearing on removing obstacles to revision. He speaks of developing "an outside eye" in which one becomes reader of one's own writing as if coming on it fresh. He argues that if writing is approached with the conceptual buzz that started it loud in one's head, it becomes possible to believe that anything one writes down *is* that buzz. So the writer's task is to read and revise his or her own work to make readers buzz (not every reader, he assures us) and to make readers *experience* the buzz in their own being with nothing but the written matter to do it. This way of using audiences to test functionally the criterion of whether the poem works requires, of course, knowing one's audience, but it certainly can help remove some obstacles to revision.

Research and Theory

The body of literature on empirical studies of the poetic process is

naturally broad. Reviews such as those of Gardner (1973) and Kreitler and Kreitler (1972) give some notion as to the wide range of disciplines bearing upon the analysis of poetic process. An entire volume (B. H. Smith, 1968) has been devoted to the analysis of how poems end, the relationship of structure to how poems end, the reader's preference for closure or anticlosural endings, and even speculations "beyond closure." Some writers, for instance, will have response sets or preconceptions that give preference to closure related to thematic and formal structures in the poem. Such sets certainly direct in a positive way the initial conception and development of a poem and set up dissonance which the writer must resolve *if* the closure does not create the intended effect or creates an unintended effect consistent with the writer's preference. But such a set can also be an obstacle to revision if it keeps the writer from seeing other possibilities in what the poem can accomplish and what one *as writer* can create by planned or random mutations.

Richards (1929) and Squire (1964), in studies of reader judgments or response to literature, have demonstrated that preconceptions have powerful influences on one's response to poems. Their method was to obtain, through observation and interview, student (ages fourteen to sixteen) descriptions of their feelings, ideas, and opinions or reactions which occurred at the end of reading certain segments of stories. Most frequent responses were interpretational (discussing meaning), narrational (reporting story details or facts), literary judgment, and self-involvement. Those who had difficulty comprehending gave more frequent narrational responses. Sources of difficulty in interpretation included the following response sets or preconceptions: happiness bound (demanding fairy tale solutions and avoiding unpleasant interpretations), literary judgment preconceptions (e.g., Is it "true to life" or "good description"?), irrelevant associations, premature judgment, and belief systems (e.g., belief that "popular girls don't like music" distorts a reader's interpretation of a character or situation). The work of Richards and Squire is obviously relevant to an understanding of audience response to the writer's work, but it also gives clues to variables affecting the writer (as reader of one's own work in process) during revision. For recent extensions of the work of Richards and Squire, see Odell (1977) and Odell and Cooper (1976). For a novel approach to assessing reader response, see Millet (1972).

The longitudinal study by Loban (1963) and cross-sectional developmental studies by O'Donnell, Griffin, and Norris (1967), Hunt (1965), Gardner and Gardner (1971), P. G. Smith (1940), and Terry

(1974) provide useful methodological exemplars for the tracking of the poet's development over time in ability to remove obstacles to revision. These studies may also be read to identify possible "obstacle-to-revision" variables or to generate hunches as to why certain language performance trends related to revision processes are exhibited within or across age groups. For example, the Loban study (grades three to six) and the O'Donnell, Griffin, and Norris study (grades K to seven) revealed considerable restriction in the variety of sentence patterns and constructions at all grade levels. Hunt's study (grades four, eight, and twelve) also revealed a trend toward uniformity in style. And Gardner and Gardner, in a study of a small sample of children in grades one, three, six, and nine, found that sixth graders had the greatest all around literary development as evidenced by understanding stories, selecting appropriate endings, control of syntax and ideas, matching of story style to a model, increasing cognitive orientation (i.e., characters think, doubt, bargain, balance good and evil), and combining daring invention with direction and control. However, grade nine children appeared hindered in literary productivity by self-consciousness and self-criticism or perhaps by the advent of more formal thinking. They also found that some verbally gifted children can be identified at an early age and that some children at each age level are like the most talented children across all four age levels.

P. G. Smith (1940) examined several thousand poems written by a group of children ages eight to nineteen and found a drop in quality as children grow older. Best boys' poetry was in the nine to twelve age range; best girls' poetry was in the fourteen to fifteen age range. The study combined observation, introspection, and correlational approaches.

Terry (1974) studied poetry preferences of children in grades 4, 5, and 6 in a random sample of 15 classes at each grade level (1,276 children) from 4 different states. The preference instrument was a five-point scale with Snoopy drawings and the legends "It's great," "I like it," "It's okay," "I don't like it," and "I hate it." The question was "How much do you like this poem?" followed by "Would you like to hear the poem again?" and "Could this be one of your favorite poems?" Reasons were asked for liking and disliking. The most preferred poems were limericks (four out of five were in the top twenty-five best-liked poems); reasons: like limericks, funny, rhyming words. Next highest were narrative poems (of all poems, the first- and second-ranked were narrative—the first was "Mummy Slept Late and Daddy Fixed Breakfast"); reason: humorous, tells a

story. The consistently most disliked were haiku because they were too short, difficult to understand, and didn't rhyme. Thus, the most popular poems used the vernacular (neat words that kids use), rhyme (end of line mostly, one internal), rhythm (listening to "Railroad Reverie," children could hear the train coming), sound (tongue twisters), humor (even when adults don't see it, such as in "We Real Cool"), familiar experiences, and animals. Reasons for lack of popularity were not understanding imagery, absence of experience in common with the poem, shortness, and no rhyme. Students tended to lose interest in poetry over the years (after a peak in grade four, interest steadily declined). Most children did not write poetry, but when they did, they liked *writing* haiku even though they strongly disliked reading textbook haiku.

Maloney and Hopkins (1973), in an experimental analysis of some aspects of creative writing, have demonstrated that one *can*, through use of reinforcement, increase the variety of student grammatical responses and that certain responses (e.g., action verbs) were more highly represented among sentences ranked highest in subjective judgments of creativity. Thus positive (reinforcing) consequences can influence writing style. Ballard and Glynn (1975) took off from the Maloney and Hopkins study and confirmed some of their findings, while demonstrating that self-management in story writing can relieve the teacher of some chores, yet still yield effective results within the teaching system used. This type of intervention study is clear and powerful in methodology but could probably benefit from descriptive studies which uncover significant variables or hypotheses and from Skinner's (1959, p. 363) first unformalized principle of scientific practice, "When you run onto something interesting, drop everything else and study it." In the Maloney-Hopkins study the "interesting" finding is that action verbs made writing appear more interesting and creative to children in grades four to six. In the Ballard-Glynn study the interesting finding is that in the last experimental phase, children rushed through the task quickly (to get their reinforcers) and then "tended to read parts of their stories to those sitting near them, and appeared to enjoy writing elaborate descriptions that were often amusing to others" (p. 397).

The review by Kreitler and Kreitler (1972) is rich in studies of characteristics of language associated with specific reader-listener response. For example, tense vowels, voiced consonants, and anterior vowels are experienced as more potent than lax vowels, unvoiced consonants, and posterior vowels. Frontal consonants are experienced as more pleasant than back consonants. The sounds /a/ (as in

large), /u/ (as in *book*), and /o/ (as in *pow*) are more appropriate for designating large objects; /e/ (as in *bed*) smaller objects; and /i/ (as in *bid*) smallest objects. Action verbs reduce the seriousness of writing style and add to its concreteness, vividness, and personal tone. Words like *rising* and *climbing* are seen as spatially higher than words like *falling* and *plunging* even when they are all presented at eye level. A medium degree of unpredictability of words in context is most appealing to readers, avoiding the boredom of complete predictability and the confusion or lack of comprehension of high unpredictability.

The volume by Gardner (1973) is likewise rich in reviews of provocative studies, including Chukovsky's observations of the linguistic genius of the child ages two to five; Buhler's progression of literary taste in children and Gardner's elaboration of the stages of literary creativity; and Gardner's speculations as to why, when most children drop their creative language usage, some few go on or continue to be literary geniuses.

And finally, a volume by Bloom (1973) outlines a theory of poetic influence that provides useful hunches for the study of the lifecycle of the poet-as-poet, with emphasis on the relations among poets. The book discusses parables, definitions, and revision patterns as mechanisms of defense, all directed toward Bloom's thesis that the creative mind has a desperate insistence upon priority of divination. This is obtained if necessary by misreading the intent or accomplishments of one's precursors.

Suggested Studies of Available Documents

The use of available documents as sources of data for investigation has both limitations and unique advantages spelled out clearly by Allport (1942), Selltiz and others (1959, pp. 323–329), Bereison (1952), and Webb and others (1966, pp. 88–111). The major advantage of available *personal* documents for the study of revision processes is that they provide information on rare and extraordinary events in the inner and outer life of the poet. The advantage of available *empirical* studies is that the difficulty of obtaining data on poetic processes warrants making use of whatever data is already available. If the data are used as "partial evidence," they can be of considerable value for cross-checking other data sources, generating hypotheses for testing in more controlled ways, and identifying and defining variables worthy of further investigation. Outlined below are three possible studies in which available documents might usefully be employed.

For generating hypotheses concerning developmental stages in "finding one's own voice," there are three phases one might go through. The first phase: read widely to generate some theory of development in "finding one's voice." One might fix upon a rather well-developed theory such as that of Bloom (1973). Or one might formulate a theory. For example: there is a fixed sequence through which one must go in finding one's own voice—finding a master model to emulate (a style or person[s] with a style), attempting to imitate the master model, mastering the master, showing the master wrong or different in some way(s), innovating, and mastering the innovation. Or one might formulate a more detailed theory outlining the obstacles to moving from one stage into another, such as using audiences for "approval" rather than the way Dickey or Ciardi would use them. For example, an analysis by Bartlett (1951) revealed the following functions provided by poet-poet interaction where a poet uses another poet as audience: appreciation, availability, criticism from a believable source, complementariness, correction, distraction, emendation, friendly discussion, harboring, lifting out of melancholy, loss of confidence, money, persistent objections, praise, precise criticism, publishing, recording, rescue from drink or drugs, secretarial help, shaping ideas, stimulation, suggestions of ideas for poems, and sympathy. The second phase: test the theory against other material in available documents for consistency or elaboration. The third phase: formulate some hypotheses and procedures which may be empirically tested in a cross-sectional or longitudinal study.

A second kind of study would aim at generating hypotheses concerning developmental stages in what the poet finds discriminative for revision. This kind of study also involves three phases. The first phase: examine the corpus of available data to identify what poets find discriminative for revision in a work, how this appears to change over time, the role of others in influencing the change, characteristics of the poet associated with changes, and techniques used by the poet to create dissonance and to remove other obstacles when needed to direct and motivate change. The second phase: develop a coding or classification system for analyzing these discriminations, and check it for reliability. The third phase: formulate hypotheses which can be validated in observational studies of the poet writing in structured (contrived) or naturalistic situations. (For procedural suggestions in analysis of behavior, see the later section on empirical studies.)

A third kind of study would generate tasks or assessment procedures that could be useful in the study of poetic process. The need for new measures of aspects of the creative process in writing is obvious. School learning measures (grades and tests) correlate poorly with

out-of-school or extracurricular writing skills (McClelland, 1973). The assessment of writing skills in the National Assessment of Educational Progress studies has yielded provocative results; but while later reports promise to get at "rewriting," the early reports (Maxwell, 1973; Slotnick, 1973; NAEP, 1975) do not discuss revision. The richness of expressive language in some special populations (e.g., urban Blacks, American Indians) which has been amply documented (Labov, 1970; Kochman, 1972) has not been tapped by current tests. Early identification of the verbally gifted is not informed by any large body of knowledge as to how these skills develop or are nurtured. Thus, the generation of a large number of tasks for observing or assessing poetic process, particularly the revision process, would provide a useful base for generating more information on the poetic process in empirical studies and for conducting the selection and classification decision research needed to improve current practices. The development of such tasks is itself a creative enterprise. One may be informed by the literature on test development procedures represented in a comprehensive treatment such as *Educational Measurement* (Thorndike, 1971); the preliminary manuscript by Della-Piana (1974) combining materials from the Praxis Corporation with traditional test development; or Jackson, Della-Piana, and Sloane (1975) on developing observation systems.

I have not referred to available tests of "creative processes" which include writing. The reader is referred to reports of the National Assessment of Educational Progress (1975), CEMREL, Inc. (Johnson, 1970), and Buros (1972), all of which are updated periodically. Still, some newer tests (e.g., Torrance, Khatena, & Cunnington, 1973) may not have found their way into these sources, and thus a look at current issues of relevant journals would be desirable.

These proposals hardly exhaust the possibilities: one must dig up other tasks from the rich literature described above by immersion in the material, sniffing around until something significant is picked up by its regularities, inconsistencies, power, or obvious relevance. A productive starting point would be the development of conceptualizations of writing processes through an examination of available documents mentioned above, then a survey of available tests of writing skills to determine where there are gaps in the processes assessed or in the validation of processes assessed.

Structured Observations as Data Sources

Most of the studies using available data sources should be conducted

before or concurrent with those suggested here. The emphasis in this section is on directions one might take in empirical studies.

Predicting Preferences for Poems

The ways in which poets might select audiences—or the ways in which poets are influenced by or actually do select audiences—have been described in this chapter as central to the self-creation of dissonance and the removal of other obstacles to revision. The use of data on similarities among judges in the attributes they use in judging a poem is important to theories of revision processes in two ways: as a means of studying cognitive structure and as a starting point for predicting (explaining) preferences using the structure obtained. The work of Klahr (1969) builds upon considerable work of other measurement theorists to present procedural models for using similarity judgments for both of these purposes. In Klahr's study "judgments" of the relative similarity of pairs of alternatives are used to construct a model of the decision space of a group of college admissions officers. This model is then used to predict the preferences of the officers. The accuracy of the predictions supports the hypothesis that preference judgments are made on the basis of the similarity of given alternatives to an "ideal" alternative. A study of poetic revision using Klahr's approach might produce the following hypothetical findings:

1. The average scaled values of attributes used in judging a poem among judges of such-and-such characteristics on a scale of 0 to 1.0 are communication clarity (1.0) and craftsmanship in use of poetic devices (.7), with other attributes all far below (.3 or lower).
2. In judging the overall similarity among a set of poems, judges respond to (take into account) the attributes of communication clarity, poetic devices, and triteness to a successively decreasing extent.
3. All judges agree on the most preferred poem, and it has maximum value on all attributes.
4. The greatest part of the variance in the quality of a poem is predictable from the distances in perceived similarity of a poem from the most preferred poem. Thus, for other judges within this group, one could predict preferences from data on perceived similarity.

This kind of data on judges would be an excellent take off for

studies on poets' uses of (or ways of relating to) audience reaction in the revision of poems. Other references relevant to this approach are Messick (1956), Kurskal (1964a, 1964b), and Torgerson (1958).

Observational Studies of the Poet Teaching

Empirical studies of the poet teaching may be conducted to identify what the poet finds "discriminative for revision" in the work of student-poets.

There has been an increase in recent years in the number of poets-in-residence or poets in the schools. Reports of their work are appearing in books and in the publications of the Teachers and Writers Collaborative and Poets and Writers, Inc. I have observed poets teaching and informally noted the possibilities of a rich source of data in the informal comments by poet-teachers about students' work. Some of this literature is cited in the section on studies of available documents. But a compendium of specific examples of what poets see as discriminative for revision would provide much material for developing measures of "revision-process" skills. These would be useful in longitudinal developmental studies, treatment intervention studies, or mixed design studies.

Hildick's work (1965) has an amazingly comprehensive classification of revisions with numerous examples which could be quite useful for empirical studies. Physically, there are only three kinds of alterations: substitutions, deletions, and insertions. Taking into account intentions, however, the list is much longer. Here is my summary of the basic categories outlined by Hildick:

1. Tidying-up changes: punctuation, grammar, awkward constructions, redundancies, clichés, suppressing jingles, unintentional puns, double entendres that disrupt mood of passage, improvement of rhymes or readjustment of meter, loosening where writing is too fluent for a character, removal or insertion of punctuation as intentional violation of usage to create special effects (comic, emphasis on rhythm, mixture of thought and action, etc.), insertion of repetition to give incantation effect, and removal of a too graceful image.
2. Power changes: greater accuracy of expression, greater clarity, or a balance between the two; better force of argument; deeper impression on reader; the right word (see the small pillars of deletions and substitutions rising above words); successful adjustment of sound to sense (described in Pope's preface to his translation of the *Iliad* as obtained by few), e.g.,

the sharpening of a visual image, *a kite high among the clouds*, is not as important as the fact that the pull and swerve are transmitted to the reader by the catch of breath brought about by a break, *the paper kite/high among fleecy clouds*, and the smoother *high among*; sharpening an image (making it more powerful in transmitting sense or emotion)—this can transform the merely competent into the exceptional by blurring a meaning, but not dulling an image, in a way that increases its power; changing dialogue, e.g., to better record a speaker's reaction to circumstances or to reveal inner stress; readjustment of timing (not chronological timing but the unfolding of ideas or images, the withholding of a fact here and there, and pauses without which the "message" comes rolling out too briskly); readjustment of point of view, e.g., switching away from the general omniscience of a character so that a new fact may be disclosed and another suppressed or so that the reader sometimes sees or knows two characters better than they know each other and, at other times, is restricted to experiencing each of them through the eyes of the other.

3. Structural alterations: major stylistic changes that make necessary many minor changes. These are changes that are a matter of insight and good sense: the insight, for instance, warns a writer that a certain character would not, with his background or habits, behave in a way that so perfectly illustrates the author's views on the welfare state, and the good sense insists that the author make the alterations necessary to fit the character to the views.
4. Ideologically determined changes: changes made by an author living, for instance, under a political or religious dictatorship where the author is concerned about the social or personal consequences of his or her writing or where the author actually has a change of views (say, after several years).
5. The ragbag of types: changes dictated by fashion (tightening or loosening of punctuation); changes to avoid what looks like too loud or frequent an echo or imitation of another writer; changes to avoid libel action; changes for purely mechanical reasons (e.g., to fit a certain space); changes to adjust to the taste of the writer's reading public; or changes to curb one's own idiosyncrasies, to diminish the risk of self-parody, or to avoid the old and familiar.

Hildick sees three values in the study of revisions: to explode the

myth of the writer pouring out verses as a fountain pours out water (and thus justify one's own lack of good output or patience); to heighten appreciation of a particular writer; and to give a deeper understanding of the possibilities of language (to judge whether a change was an improvement, to see a variety of changes, and thus eventually to be able to choose one's own changes or directions or strive for one's own voice). My major concern is with the use of such categories to better understand revision processes, to direct research on these processes, and to lead to better assessment procedures and teaching practices.

Hildick also presents conventions for the representation of revisions. In the first instance, a deletion in the text under study is followed by a running substitution made directly after the deleted word:

Type: Deletion/substitution

Convention: Draw a line through the word or phrase

Representation: For ~~example~~ instance

In the next case, the substitution in the text was originally written above the deletion; thus it is treated as an insertion:

Type: Insertion/substitution

Convention: Underline the appropriate word or words

Representation: For ~~example~~ instance

The final convention is more complicated. The text being studied might look like this:

any
, without ~~the slightest~~ hesitation,
and then ∧ he would go.

The phrase "and then he would go" was written first; the phrase "without the slightest hesitation" was then added. Finally, "any" was substituted for "the slightest." The representation of this is as follows:

Type: Insertion into an insertion

Convention: Double underline

Representation: and then, without ~~the slightest~~ any hesitation, he would go.

A research strategy using behavior observation of poet-teachers might be as follows:

1. Selection of poets: prepare a list of forty-eight poets using a sampling procedure that identifies, say, younger, recently published poets representing a diversity of styles and cultural backgrounds.
2. Final selection limitations: set a limit, say, of six poets on the basis of interest in the project, rate of writing, willingness to engage in activities outlined, and representativeness from among the styles specified.
3. First solicitation of poets: ask all poets on the list to send copies of their "best five" poems (published or not) and answers to questions concerning the willingness to participate in the project by mail or in person. A further commitment might be asked: to make available their notes on revisions, read (tape or live) some of their works, and revise a poem, keeping a record of the process. An honorarium might be given to all poets responding fully.
4. Second solicitation: let us say that sixteen poets respond in a way that makes them available for the next phase. Each might then be asked to send one poem with revision sheets and comments on what they discriminated as cues for their revisions. Also, they might indicate availability for coming to the project site for five days. An honorarium might be sent to poets responding with materials as requested.
5. On-site study: six poets might now be brought on site for five days of work. During this period, they could do the following: (a) read some of their poetry to a group of five students each and then give the students *starters* to experiment with one or more of their own experimental approaches to writing poetry; (b) provide feedback to the students on their work in the form: "This I would revise," "I call it such and such" (e.g., trite, unnecessary words, etc.), and "I would go about it in this way" (suggesting direction but not actually revising poems for students).
6. Documentation: a record of the poet's contributions (written and taped) might be kept along with their own summary of what was of value that could be passed on to others about revision of poems from the viewpoint of writers, teachers, and researchers.
7. Transcription: material could be transcribed and prepared in form for analysis.

8. Analysis: material could then be analyzed by students in linguistics, literary criticism, and behavior analysis to generate descriptions of idiosyncratic revision processes (i.e., What was discriminative for revision in the poet's feedback to students?) and examples for each category. The intent would not be to get a list of accepted rules for revision but to document the variety of idiosyncratic styles for a given poet, for poets of the same "type," and for poets of different "types."
9. Classification: summaries might be made of those characteristics of poems that appeared to be discriminative for revision together with examples and—where available—revised material. In form, though certainly not in complexity, the analysis might appear as follows. (Brackets in the original indicate words that were discriminative for revision.)

Trite Phrase

Original	Revision
We must have seen the moon [wax and wane] forever	we must have searched for the moon forever

Unnecessary words or phrases

We kicked the nervous dirt [up with our toes And we never] watched each other's eyes [as closely]	we kicked the nervous dirt watched each other's eyes

Making a metaphor "happen"

they flame up the trees the colors dying all blackened [for the night is coming]	they flame up the trees colors die in the night

Abstraction or generality

[you were pretending to have no needs]	(eliminated)

10. Sources: suggestions for classifications can be found in such works as Hildick (1965) and in the work of specialists in linguistics (e.g., Russell, 1969; Bickerton, 1969; Kiparsky, 1973), computational stylistics (Sedelow, Sedelow, & Ruggles, 1964), and poetic closure (B. H. Smith, 1968). See also *The "Paris Review" Interviews* (Cowley, 1958; Plimpton, 1963; Plimpton, 1967) and others cited earlier.

Observational Studies of the Poet Revising

Some of the procedures described above for studies of the poet teaching might also be used for the poet revising. My earlier suggestions for selecting a sample and coding responses would certainly be applicable. For an interesting model of development task test-interview methodology in the field of mathematics, see the report of Soviet studies in Kilpatrick and Wirszup (1969). A strategy I recommend based on some preliminary work of my own is as follows:

1. Have poets bring in their own selection of drafts of poems *they* feel are worth revising.
2. Ask poets to tell why they selected a poem to revise and what there is that they felt uncomfortable about (discriminative for revision) and comfortable about (no revision needed).
3. In the initial contact with poets, the approach might be as follows: "We are interested in studying how poets revise poems. Very little is known about this, and we realize that the processes may be so highly individual that there is little commonality. Nevertheless, we wish to see how a variety of poets go about revising poems. Would you be interested in participating in a study with us? What we want of you (and other poets) is simply to sit down in our work space and revise poems you select. We will make as complete a record as we can of your work and then write up a descriptive account of it. We can pay you a modest honorarium but, of course, for this kind of work, no one could pay you what it's worth—it's tough work. Would you like to participate? What is your schedule like so we can call on you and set up appointments?"
4. Design the work space and try it out, refining the procedure with a "pilot" poet before use with experimental poets. Design the observational conditions to allow for a variety of working styles, e.g., Will poets compose in longhand or use a typewriter? Will they revise during prewriting or writing? Will they be composing short- or long-term poems? Are they disruption prone (can't talk or be interrupted or have noise while working)? Be sure to consider other environmental details, e.g., coffee, interaction among poets. Also, design conditions to overcome as much as possible the limitations of similar data in available documents, e.g., deception (intentional or unintentional), legibility, omissions, clarity of conventions used by writer, specification of what was discriminative for revision.

The initial design might be as follows. Set up a tape recorder in an observation room with voice-activated mike. Give poets several numbered copies of a triple-spaced poem of their own to be revised and a thesaurus, a dictionary (an encyclopedia?), paper (numbered), pencils, and pens. Then say, "We are studying the revision process in poetry writing. We just want detailed records of what poets do when they revise a poem. Here is one of your poems to be revised and some materials. Read the poem and make as many revisions as you desire to make it a more polished, better poem in your judgment. If you need anything, pick up the phone and ask for it. Work aloud as much as possible when you are looking up words, reading the poem, considering revisions, and so on. We would like a record of as much of your activity as possible. When you write, do not erase. [Have poets use a pen?] Use this paper in sequence if you can. Take as much time as you need. Finally, the only real consideration you need make is with respect to process. Leave a record of your every move if possible, but work in the style with which you are most comfortable. If you like talking out loud or can do so easily, do it. If not, keep written records as much as possible. When you are through, we will go over your work and call you back once more to get your reactions to questions we may have. Do you have any questions now? [If so, try to answer by reference back to the above statement. If anything is added, make a note of it.] You may take as much time as you desire and return for another session if you wish. We realize many poems must sit for days or years before you finish or abandon them, but that of course will not be part of this procedure."

5. Get typescript of all oral responses; using it and notes of the poets, try to make a detailed consecutive record of what the poets did in the process of revision. Get this record typed.
6. Make a set of "prompts" where there is some question as to what the poets did, the sequence in which they did it, the occasion or cause for doing it, and the consequences for making certain responses.
7. Call a poet back; employing your prompt sheet in an interview situation (the poet should have a copy), use a stimulated recall procedure to get the information noted in the prompts.
8. Develop a scoring or categorization system for "revision

process categories" and have another person score to determine reliability.

9. Revise task, setting, scoring, etc., if necessary, and repeat the process with another poet.
10. When task, scoring, etc., seem appropriate, recall the study group of poets one at a time and conduct the study.

Observational Studies of Poet Development

Perhaps the most significant kind of empirical study of the poet revising and removing obstacles to revision is the tracking of these processes as they develop over time. We have all heard preschoolers say things like "she has curtain eyes" or "he has ketchup eyes," only to see such children later fail a test of metaphor in grade six. Similarly, it is common to find children who cannot write a "poem" but who write and speak poetry. We know little about the processes that result in these outcomes, nor do we know very much about what goes on between the manifestation of early poetic talent in a child and its later perfection, whether as imitator, master, or innovator.

Longitudinal studies are expensive and some say impractical. But the combination of a cross-sectional and a longitudinal study is a real possibility. For methodological suggestions on developmental studies, see Nunnally (1973), Goulet (1968, 1973), and Hooper (1973). For combining descriptive studies in natural and controlled environments with experimental studies, see Willems (1973). For introducing treatment interventions during a longitudinal development study, see Risley and Wolf (1973) and Baer (1973). For provocative hunches on treatment variables for a longitudinal intervention study, see Skinner (1972, pp. 333–344). Other than these general suggestions, I have little else to recommend on the kinds of developmental studies one might engage in because this is an enormous task and because I believe much preliminary work must be carried out before the developmental work can be undertaken wisely.

The first preliminary work must be the development of operational descriptions of the processes one would investigate (see the section "Suggested Studies of Available Documents"). Then a cross-sectional study across age groups prior to a longitudinal study might be appropriate. In the cross-sectional study, one might proceed generally as follows:

1. Select age groups (ages eleven, fifteen, nineteen, and twenty-five to thirty).
2. Within each group, sample high verbal and low verbal

persons as determined by a variety of measures, including oral language (e.g., retelling a story, peer conversation, oral vocabulary tests), reading (vocabulary, comprehension), and writing.

3. Design a wide range of assessment procedures (see the final paragraphs of the section headed "Suggested Studies of Available Documents" for references on assessment). The tasks might include verbal abilities and skills (associations, vocabulary, metaphor, etc.); narrational skill (retelling a story or making up a new ending or a new story in same genre); writing long and short poems with and without revision and with and without specific checklists for revision; choosing a "master" and indicating verbally and behaviorally one's tendency to imitiate, master the master, or surpass the master; keeping a source notebook for poem starters or ideas; describing the ways in which an audience helps or hinders; identifying obstacles one is aware of in one's work (no new ideas or vision, lack of dissonance or discomfort with own work, etc.) and giving examples of their existence and of how one copes, has coped, or intends to cope with them.
4. Administer tasks to the selected sample. Analyze data descriptively and for intercorrelation and trends with the aim of refining the tasks and generating hunches concerning developmental trends. Try to answer such questions as: When does revision take place with different poets? Are there developmental changes in the variety of behaviors observed? How do poets break away from premature closure on a poem? How do revision stimuli vary over age groups and experience? How do poets generate their own dissonance for revision when it does not occur naturally? What sustains revision when other things interfere (e.g., time, acceptance)? What are the different revision processes for different types of poets (e.g., inventors, troubadours, versifiers, objectivists, masters of imitation, etc.), and how do they change over time?

Closure

B. H. Smith (1968, p. 36) says that "closure occurs when the concluding portion of a poem creates in the reader a sense of appropriate cessation. . . ." In the field of research on composing, I

feel the needed "closure" is temporary abandonment of talk about it so that we may get on with the work. There are two writers I will draw upon for this anticlosure: Skinner, for his philosophy of science, and Joe Kirk, a poet, for his "all-humbling" poetic light.

Skinner (1959, pp. 359–379), who should be emulated as much for his philosophy of science as for his findings, has given us an account of his own research behavior as a case history in scientific method. He chose the case history approach in part because "we do not know enough about human behavior to know how the scientist does what he does" (p. 361). Thus, before we can conduct a functional analysis of this, or any, complex behavior, we must have many examples of it. Two of the "unformalized principles of scientific practice" which he makes use of in his own work are: Principle No. 1, "When you run onto something interesting, drop everything else and study it" (p. 363) and Principle No. 5, "Serendipity—the art of finding one thing while looking for something else" (p. 369). I recommend them to the reader as useful response sets to add to whatever else is found useful in this paper.

The process of revision in the writing of poetry is no more amenable to a functional analysis than is the behavior of the scientist. We shall have to get many examples of "poet revising" and "poet removing obstacles to revision" before we can generate the functional analysis that is required, thus my emphasis on descriptive studies. But lest the reader think that anyone going about the research proposed here will easily come up with answers, I abandon this paper with a humbling bit of a long poem by Joe Kirk (1974):

Aha! someone says with a snap of

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and never use the same finger twice

9 Helping Young Children Start to Write

Phillip Lopate
Teachers and Writers Collaborative

There used to be a debate when teachers of writing got together: How long should the discussion go on before handing out the paper?

Some felt it was very necessary to stimulate the adrenaline first, to start the juices flowing, the memories rolling, the words bouncing around in the students' heads. Others favored a more poker-faced, neutral style: a brief exposition of the assignment at hand, no more than five minutes, then get down to writing. The latter group maintained that a long, excited discussion might drain the students of their urge to express themselves or carry their energy to a disruptive level inimical to quiet writing. The first group, the animators, countered that it was worth the risk to generate excitement about literature and ideas. Behind this rather narrow trade question was a much more serious one: What is the actual causal relationship between speech and writing?

Part I: The Transition from Speech to Writing

It has always been surmised that talking is a good prelude to writing, though the terms of this conversion, the precise means of setting the scene and controlling it effectively, have been left rather vague. Let us say that a teacher wants the students to try their hand at a poetic form, like a sestina, haiku, or list poem, or else at something more thematic, like writing spooky stories for Halloween. The normal way to go about it—the instinctive, unquestioning way we usually do go about it—is to have a discussion about the characteristics of the form or genre, to give a few examples so that everyone understands, and then to ask the students to try writing one on their own.

I am assuming for purposes of this article that some writing will be taking place in the classroom. Of course, the teacher *could* assign the

writing for homework and spend class time on critiques, like a college writing workshop. But at the earlier grade levels it is often impossible to set up such a seminar atmosphere. The only way many children will ever write is if they are asked to write at school. And getting them to try it directly after discussion is as good a time as any, since the ideas are still fresh.

During the discussion the teacher will probably want to draw out as many students as possible: for instance, with Halloween stories, encouraging different children to tell actual scary things that have happened to them to anchor the subject matter in personal experience. It is generally assumed that the more interesting the discussion, the better the writing which will follow.

This is not necessarily true. If it were always so, life would be much easier. What I have found is that there is no way of predicting the calibre of writing which will ensue from a particular presentation. Neither a juicy discussion nor a lazy, neutral, or perfunctory presentation guarantees the creative output of the students' works. The discussion has its own dynamics and its own needs which I usually try to satisfy; the writing is an entirely different activity.

In fact, I have tried an experiment of acknowledging this separateness and refusing to tie them together, first by conducting a discussion on any area of life and literature, then by giving the students the option to write on whatever they felt like—that is, purposely not stipulating a writing assignment. This holding back of the assignment struck the children (and me) as perverse; it perplexed them. Some children tried to second-guess me by writing stories on the day's discussion topic anyway, supposing that that must be what I really wanted. Others struck off in an independent direction. Still others chose to play around, while a select minority kept whining, "What are we supposed to *do*?" I refused to tell them what to write about; I wanted them to answer that question for themselves. In short, much more fragmentation and varied individual response, which isn't necessarily bad, resulted from this tactic than from providing a single topic.

Collaborative Class Poems

Collaborative composition is midway between group discussion and solitary writing; therefore, it is in a perfect position to tell us something about both processes.

Let us say the discussion has gone well. Still, something is missing—I can tell by their eyes; they do not look quite ready to write. In order to illustrate the technique of writing poetry, I may

decide to do a collaborative poem with the whole class. A collaborative class poem is one in which the students call out ideas, and the teacher writes them on the board or on paper. The teacher acts as coordinator or scribe: depending on his or her personality or sense of the class's needs, the teacher can either include every suggestion uncritically or else select some ideas and ask the group to edit or improve lines. At the outset, the teacher might establish certain rules, like repeating a verbal formula in every line (using "In the middle of Halloween night . . ." as a recurring refrain, for instance, to stay with our Halloween example). Or the teacher might have the class improvise one continuous, open-ended poem. But however open the form is, it will tend to suggest a closure somewhere along the way: either the class will run out of ideas, or a triumphant twist will be hit upon which naturally ends the poem—to cheers, if the piece is any good—because there is nothing so miraculous as the spontaneous composition of an actual *poem* by a group of students who didn't know they had it in them.

Then the teacher asks the students to try one "on their own." Here is where the teacher often runs into trouble, just when everything seemed to be going so well. The handing out of paper is greeted by the students with expressions of resistance, as if they were getting a spelling test. "But it's a poem, after all," one may think with hurt, "and they were just enjoying poetry so much." What one fails to take into account is the wide gulf that separates the social euphoria of the collective poem from the lonely individual effort.

One of the most important side effects of the collaborative class poem is that it validates the social group. The pride children feel at seeing their classmates and themselves pull off a successful collaborative poem is the exultation of being part of a winning team and is of an entirely different order from the inward satisfaction gained by lone authorship. It may be as important for the student to experience that sense of group pride—indeed, in clique-fragmented classrooms, it may be more important—but the two satisfactions should never be confused.

Even aesthetically, the collaborative class-written poem is not just a tooling-up for individual work; it is a sort of invisible genre in its own right. The method of production, with its peculiar demands of blending multiple voices into one stream of verse, enforces certain decisions, compromises, and markings which amount to an identifiable style. Wit, fast tempo, rapid changes in point of view are the basis of that style, which gives some children's collaborative poems a very avant-garde surface (I include wit for the simple

reason that children would be more apt to expose their humorous side publicly than their somber side). I often wonder what will be the lasting effect of collaborative poems on the writing of individual students. I secretly hope that the collaborative poem, on the board for all to see, will provide a visual model for the appearance of modern verse—the look of a poetic line, the uses of end-stop and enjambment. And some children do pick up these things; but most return to their usual style, rhymed or whatever. Certainly the reckless tempo, linguistic freedom, and subject leaps which characterize the collaborative class poem rarely carry over to the individual student's work. This is probably because the liberties of discontinuity which a thirty-headed intelligence can take, abetted by a sophisticated adult coordinator, are usually greater than a single mind working alone. The factor of *author's responsibility* is eased in a group composition setting, so that a student may feel free to call out "crazy" ideas which he or she would not want to put down in his or her own handwriting.

What is lost in one area is gained in another: very often the individually written works are much more concentrated, satisfying, and personally felt than collaborative poems. But without entering into comparisons of quality, one thing is certain: compositions written by a large group are recognizably different in style from those written alone. And children make this distinction in their own minds.

The children see the collaborative poem as one kind of activity, a form of fun, and the individual writing as another activity entirely, more related to their daily schoolwork. We teachers may think of the two as one continuous flow, but they don't. No more than does a boy when his father takes him swimming and supports him as he floats and then casually removes his hand for a second to let the kid try it by himself. No matter how casually you may make that moment of abandoning support, the child is not apt to miss it.

Going Under

Often after I have done a collaborative poem with a class and begun introducing stage two, several children will wheedle and beg, "Let's do another one. Come on, that was fun, let's do one more together!" And on those occasions when I have insisted that it was time to write individually, the coyness and wheedles have sometimes turned to ugly scowls.

This has happened often enough over the years that I unconsciously flinch whenever I come to that transition point. I may try to

introduce the individual writing as unobtrusively as possible—slip it over on them, you might say—but already I am bracing for a fight. It's one of the most disagreeable parts of being a writing teacher, this power struggle. For an indecisive moment the tide can turn either way. The antiwriting students know that if they push it strongly enough, they can manipulate the situation into a free period. Meanwhile, the children who want to write watch silently, and the neutralists are ready to go either way. I step into the indecisive moment and impose an austere, silent mood—a tyrant. Even when I tell them that "you don't have to write if you don't want to," some are still annoyed that the group entertainment is over, annoyed at the quiet drying up of social interaction.

I have only to think of the kid who had so many good lines to contribute to the class poem but who fidgets in boredom and dismay once paper has been handed out. He stares around him, looks up at the board's instructions as if unable to believe that this is happening to him, tries to engage the eye of another kid with the hope of promoting some merriment, and, finding himself shushed by the teacher, begins to understand that he is absolutely cut off from the consolations of human company. He is drowning without even being able to scream for help.

To write is to have to *gò under*, to dive into the deepest part of oneself. It was one thing to call out a few clever lines when everyone else was talking, quite another to face the prospect of committing one's soul to paper. The panic on the face of someone being made to write when he or she doesn't feel like it suggests a loathing against an invasion of privacy: in short, a rape, against which only those students most in touch with their muscles' desires are capable of defending themselves. Usually those students are called hyperkinetic or, in simpler language, troublemakers.

I approach the boy.

"Tony, how is it that you, who had so many good ideas to give to the discussion awhile ago, can tell me you have nothing to write about."

He shrugs: that's just the way it is, boss.

"Why don't you try writing down the thing about the burglar alarm—make it into a story."

He looks at me as if I'm an idiot. He has already delivered that story to the public. Why tell it again? And in a way he's right; I am being dishonestly ingenuous. Why is it necessary to have a written copy of everything for posterity?

In some cases, students may lack reading and writing skills and be

ashamed of having their ignorance exposed. Fine—then their reluctance is understandable, and you can work with them on acquiring the skills. But with other children there is no lack of technical skills; they simply don't see the necessity of translating spoken words into written form.

I keep circling around that chancy, awkward, difficult moment of the progression from speaking to writing, because in a sense I feel that the ease of transition has been exaggerated. The pedagogy of creative writing in the last ten years has continually stressed the closeness of oral to written expression. This comparison is valid, especially if it can reduce the fearful attitude of people toward writing as a mandarin practice and connect students to something they know very well how to do—talk. But there is the possibility that we may be overstressing the similarities and underestimating the differences between the two modes of expression as a false gesture toward making everyone who has anxieties about writing weaknesses feel better.

"Don't worry, speech and writing—it amounts to the same thing." On the contrary. One can easily appreciate many people's preference for speech. Speech is sociable. Speech has the euphoric tendency to rekindle faith in a social order. With every exchange it knits and reknits the relationship between people. Speech is improvisational, relatively unpremeditated, impulsive: you open your mouth not knowing exactly what is going to come out or when you are going to stop, but you trust to your adrenaline to pull you through. The whole body speaks through speech, not only the tongue. Speech rushes on, it doesn't look back, it burns its bridges underneath. It is an underedited tape of messages that erases itself in its headlong flight. Speech longs to go on forever, for an infinity. The last thing it wants to do is stand still. Nor can it stand still.

Writing, however, is more intentional. It is secreted from a more underground, ambitious part of the will than that nervous urge that generates speech. People are right to be intimidated by writing. Writing is intimidating and knows it. To pick up a pen is to seek to force another's thoughts in an extremely controlled, channeled direction. Unlike the speaker, who more charitably allows for a peripheral view of the surroundings, the author cuts off all exits and forces the reader to focus exclusively on the page.

Nowhere is the difference in volition between writing and speech more evident than in a comparison of material by those writers who have purposely striven for a talky style with the reading of a verbatim transcription. Stylists like Céline, Ring Lardner, and James

M. Cain have all testified to the pains it takes to give written language the natural, colloquial quality of everyday speech. By contrast, transcripts of tape-recorded conversation (see the Watergate transcripts) often have an otherwordly abstractness and lack of *voice* that makes them maddeningly thin.

Finally, good writing, especially poetry, is able to stand still—and not merely because the words are pinioned typographically to the page. It is the peculiar charm of good poetry that its words can have an iconic, static power, in addition to, or sometimes even opposed to, their utilitarian meaning, which arrests readers in their flight. A good line of verse, to use Valéry's simile, sends the reader back like a pendulum to the beginning of the line.

It has always been felt that words have a certain power, when placed alongside specifically chosen other ones, to produce resonances between themselves like adjoining tuning forks. And even if most of the writing which our students do never attains that art of vibrating particles, it seems to me that once they embark on the act of writing they are already inheritors of the whole necromancy of literature. They are practitioners, like it or not; they are already lost to the world. They have begun on an uphill climb which could easily stretch to infinity. Don't you think they suspect this? Some of them seem to be loving it. Others are groaning . . . Maybe those who resist have good reason to balk at setting out on an activity which is so monstrous in its potential demands.

Part II: The Moment to Write

It always amazes me, after I have taught a creative writing lesson and handed out paper, that the children write any poems at all. I could never write a poem in such a vulnerable, exposed situation. Yet they do write often fine poems, at gunpoint as it were. Maybe there is nothing so mysterious about this: they are reconciled to the rule of authority which continually expects production on the spot, in ways that an adult would never dream of demanding of him- or herself.

When I write seriously I need to go off by myself. Writing is a solitary and private act. Yet the teaching of creative writing, including in most cases the actual writing, takes place in classrooms with groups as large as forty students. There is an embarrassing contradiction between the public character of the classroom and the need that writing imposes for quiet introverted space, which poses problems for our teacher that won't go away.

Perhaps it would be useful to draw a distinction between two kinds

of writing: writing on assignment (such as daily newspaper columns, copywriting, bureau reports which must be done by a certain deadline) and another kind of writing (novels, poetry, philosophy), where the demanding agent is less external than internal. I mean absolutely no slight when I say that it is easier to do the first kind—and it often is—in noisy, crowded workplaces. The second seems to require more isolation. The same person can write excellent advertising copy in an office but must go home to work on a novel. When we ask children to pour their hearts out, to write truthfully and authentically in a vivid individual voice, and at the same time require that the work be produced on the spot in classrooms, we are essentially asking that the second kind of writing be produced under circumstances devised more for the first kind.

Unpopular as this fact may be, serious creative writing requires withdrawal. So much is this the case that the only really useful advice I could give to someone who wants to be a writer is *learn to be alone.* People with all the verbal and imaginative facility in the world who cannot stay alone with themselves will never be writers. Writing is a long seclusion. Out of the walking, out of the brooding, out of the boredom of childhood, out of the residue of pleasures and the memory of people who left a confusing last impression, out of all that sifting comes congealed thought—and literature.

When to Write?

Let us put away for a moment the question of helping children to write and look at the process in older people, amateur and professional writers, to see what can be learned from these more developed models.

Assuming one has agreed to be alone, how does one know when to start writing? This question is not as moronic as it sounds; in fact, it may be the key consideration. How does one tell when the best moment has come to start writing? What are the emotional clues, the weather signals? Perhaps the clues are different in each person, but merely because they are so particularized does not mean they aren't important or that we shouldn't give consideration to the question of teaching people to recognize their own patterns. The motivations which spur a person on to write may change, but intimate knowledge of one's own working habits allows one to keep writing by adjusting to the changes. Frank O'Hara once said that when he was younger he could only write poetry when he felt gloomy or depressed, but later he needed to feel good in order to write. This revealing statement sums up, in a sense, the progression from adolescence to maturity. When

adolescents write poetry, more often than not they choose a moment when they are miserable: their writing is part of a vendetta against the world which has cut them off from happiness. Many people who showed promise as adolescent poets fail to pursue the activity simply because they have made an unconscious mental equation between poetry and gloom. The emotional crisis of their adolescence has passed, and with it the urge to write poems.

They would not think of squandering their happy times on writing poems. Most of us during those brief, charmed moments would rather ride the escalator in Bloomingdale's or go for a walk and stare at the lake. A fear persists that any looking inward or concentrated mental effort of the sort required for writing might spoil the happiness. Yet is it necessarily so that introspection destroys happiness? I doubt it . . . And poetry would be a much more enjoyable business for everyone if the people who wrote it chose to share their thoughts at the peak of their vitality and love of life, rather than at the nadir.

A third state, the one in which most good writing gets done, is neither depression nor joy, but even-temperedness, clarity, calm. The space around you appears considerable. You feel yourself able to extend outward in all directions and to entertain any threatening speculation with equanimity, as though the issue of your life were somehow already decided. From this vantage point, it is as if you were able to keep thinking beyond the grave with utter calm: "The terrible fatality has happened; I have already died; and now I am able to say a few things cogently." I find this clear-headed state particularly useful for the writing of long prose, where what I want is the feeling of a large block of time in front of me.

With poetry, however, it doesn't hurt for me to feel a little rushed, upset, physically galvanized. I know something is up when I start hearing the echo, which makes even ordinary thoughts like "I have to pick up the laundry" take on a melancholy bearing, a rhythmic certitude and significance that would be laughable at any other time when I am feeling more skeptical. This sudden conviction that I *know*, that I am walking in the fields of knowledge and everything is very simple, this impression of shadows and depth behind every thought and observation, is partly a function of the echo. Sound-consciousness alone can be a kind of fool's gold, a trick of phonics, unless it is accompanied by feelings in the body. I can tell a poem is coming on from my stomach. A churning in the stomach is the infallible guide; it alone assures me that the emotion which precipitated the poem will last at least as long as it takes me to set down the first ten lines. I

always worry that the feeling will desert me before I come to the end of the poem. If I start with the musical echo alone, it may turn into drivel. So I look for that peculiar synchronization of ear and gut.

Much modern verse, from Whitman on, is held together by the poem's ability to generate waves of charged longing, each line beginning a new oceanic surge and drifting back again to face the next beginning. For me, the center and generator of these waves is the stomach. It may be another organ for a different poet. I am offering my own responses only because I am most familiar with them. The crucial thing is that these physiological signals do exist, telling the writer when he or she is ready to get down to business.

There may be long periods of waiting when nothing is happening: mental states filled with radio static or subvocal complaints whining and quarreling with each other. When I get like that, I don't see any point in writing. The work will only come out fractured and sour. I need to feel whole to write. Which means that I have to be patient with myself when I am feeling dispersed and wait for a better time. *Waiting is half the discipline of writing.*

I am not saying that writers should sit on their hands and do nothing while waiting for those somewhat mystical signals. On the contrary, they can take notes, edit other material—or they can go ahead and fight the mood and hope to bully it around to their way. They can try to stumble on their wholeness in the act of writing; with a bit of luck, they will. Most professional writers get into situations where they have to ignore their feelings, like Flaubert, who boasted that he had written comic scenes when he was bored to tears or ready to hang himself. But even the stalwarts, the Stakhanovites, who allot themselves a fixed quota of hours and pages per day, occasionally have to take a day's vacation before approaching a difficult scene and dally over minor material until they feel their energies have been marshalled for the climax.

I am convinced there is such a thing as *inner ripeness* in writing. One can ignore these signals or follow them, but the ripening process goes on nonetheless. If I choose to obey the voice of resistance and refrain from writing when I know I do not really feel like it—I'm too tired or would rather putter or read a book or walk the streets—then I find I will be that much more able to pick up the cues of inner readiness. Often, giving in to resistance seems to be a way of tricking the urge to write into appearing: after reading a few pages of a thought-provoking book, I will suddenly put it down and go over to my desk. I have indulged myself, I am ready to work now. The feeling is one of an immense willingness to begin.

When you have picked the absolutely right moment to write, *then two-thirds of the technical problems which come up in composition are already solved*. The transitions flow unforced, the structure has an inevitable logic which reflects the harmony of the writer's mental state. There is no need to wrack your brains for metaphors or comparisons to express meaning. The image comes of itself, without being bidden. At the moment you have written it down, the next image, the next thought is there to take its place. In this charmed state, everywhere the mind turns objects have a slanted, piquant, amusing side; every association leads to an even better one. The piece is not so much written as transcribed while sung in the ear. Obviously, these experiences do not happen very often, but a few are enough to cement a life's vocation. The memories of these gifts from heaven are what keep many writers going during all the subsequent hours of mundane grudge work.

I cannot leave this science or pseudoscience of picking the best moment to write without saying something about the rites of preparation for the act of writing.

Hemingway was reported to have sharpened pencils as a trick for getting in the mood. Keats dressed up in his most formal suit before sitting down to compose a poem. Schiller kept a drawer full of rotten apples from which he took a whiff whenever he was running low on inspiration. Others have performed elaborate morning ablutions. (I like to wash the dishes.) It would not surprise me if another writer stood on his head for ten minutes to stimulate mental circulation. All these practices, religiously collected by literary hagiographers, are equally legitimate, equally effective, and equally irrelevant for anyone else. They point to the superstition that surrounds the act of writing, the idiosyncratic ways in which various authors try to ward off distracting ghosts and summon their concentration by magical acts of repetition. It is not so important for us to know how particular writers prepare, but it is important to understand that apparently they feel a ritual is needed. However silly or self-indulgent it may appear to anyone else, they have found out what personally suits their nervous systems.

Writers watch themselves like thoroughbreds. They keep taking their temperatures, alternately resting and pushing themselves, looking for signs of weakness and strength, looking always for that optimum moment to release themselves for their run. It is not a question of crippling self-consciousness, because this vigilance eventually becomes a sixth sense that requires no extra effort.

Implications for Teaching

Looking at the implications of this for our teaching, doesn't it seem neglectful that the poets in the schools teach children the latest forms and techniques of composition without letting them in on a factor which counts so heavily in their own writing lives? We writers have wracked our brains searching for new lesson assignments, new materials, games, whole word catalogs to stimulate the imaginations of our students. Writers who have no particular sympathy with concrete poetry will teach a lesson on concrete poetry because they don't want to deprive their students of contact with this stylistic option. But their own practices, their own acts of preparation, their own voodoo as it were, they keep to themselves.

Is it because it is impossible to teach other people an awareness of individual timing in the area of creativity? Is it something one must learn for oneself? Are these metabolic regulations so exclusive, so personal that they have no meaning for anyone else? Or is it rather that inner ripeness is a hard-won secret that the professional is reluctant to share?

As I see it, nothing could be more valuable to teach young people than this one quality. Be it sports, art, research, lovemaking, engineering, business, for people to know when they are at the peak moment to make an exertion is one of the most crucial advantages they can have. Think of the alternative: without that knowledge, these same students will be doomed to following someone else's timetable—passively waiting for authorities to lead, resenting the order when it comes, bridling, sabotaging, but not knowing how to listen to their own energy's voice.

I wish I could propose a curriculum to transmit this quality, which would make a triumphant finish to my article; but at this point in my thinking I am only able to state the problem. Maybe others will now come forward with approaches and clarifications for teaching the moment to write. In the meantime, it would help to consider some of the recent trends in education which touch on this problem.

Let us look again at the paradox we started with: How do we reconcile the teaching of creative writing or literature, which is mostly done en masse through lessons, and the necessarily solitary act of writing? I see now that another way of putting this is, How can we bring the privacy of the child's own room closer to the classroom and make the child able to feel self-absorbed and alone in a good sense, alone with his or her thoughts?

The architecture of the open classroom is certainly an attempt to build more of a transition between home and school. Couches,

creativity nooks, reading lofts, sanctioned hideouts are all part of a healthy tendency to provide the individual child with more latitude in choosing the right place to retreat and work. Some teachers allow the children to stretch out on the floor and to choose their own writing implements from a variety of felt-tipped markers, pens, different shapes of papers, thus encouraging a freedom in the mechanics or media of writing to compensate for the coercion to write. All of these adjustments have a considerateness about them in not expecting everyone to be able to write spontaneously at their school desks. Since professional writers compose in every possible sitting, reclining, and standing position, I think there is good reason to extend that freedom of posture to the classroom writer.

Unfortunately, many open classrooms are so noisy, with lusty hammering, rabbit cries, and small group meetings, that they have the ambience of a bomb shelter. Also, many of the children are so preoccupied with what the other children are doing that they have a hard time getting into themselves. The noise and opportunities for incessant vague wandering and visiting make open classrooms in certain respects less congenial to the private act of writing than traditional classrooms.

Another approach seems to be to recreate the thoughtful, contemplative tone of the home den in the lesson itself. One teacher who was successful with children's writing told me she instituted a "poetry hour" during which all the children gathered around the couch and talked quietly and then wrote. It was understood by the children that this one hour a week was a sanctuary, a time to speak about subjective impressions, mysteries, things which made them feel uncertain or indefinitely aroused, or simply things that made them feel. This sort of quiet truce in the school week would be valuable even if it had nothing to do with poetry.

There is also something of the old ghost-story hour about this practice. The voice and character that the teacher transmits can be instrumental in setting the scene. Just as the storyteller held listeners spellbound and made their skin crawl, so a good poetry teacher can exert a spell through the timbre of voice, the choice of words, the quality of concentration and bring the students down and down into it. Here we enter the area of performance. The teacher performs in such a way as to create a mood of inner stillness, like a strong preacher or a flamenco singer. Students respond as if partly in a trance, leaking words on paper. The transition from speech to writing is very gentle, sometimes barely noticeable. I have been present at such hushed states of suggestibility which led to very

good, intimate writing by the students. They make me uneasy, perhaps because even though I have sometimes been the instrument to bring them about, I would not myself like the idea of writing so internally on someone else's deep suggestion.

And yet there are some students who seem to be able to write only in public. Even in college, they prefer to let go to the scratching sound of other pens. So there is really no way of generalizing about a "best" set of writing conditions for everyone.

Another writer asked his students to lie down on the floor, all together, and begin breathing deeply. After awhile, the children were asked if they could visualize something happening in their chests. They were told to think of an image which illustrated the bodily sensation they were going through and keep taking in deep breaths, then see if the internal sensations suggested another image. At the end of the exercise, they were asked to write down these images or write a poem or story connecting the images. This exercise derived from Jungian psychotherapy. The writer reported that the stories the children wrote that day were very serious and deep. Nevertheless, he was unable to think of a way of taking this one-time experience further.

There can be no question of the connection between physiology and writing (or all creative processes). But I confess that I myself would be reluctant to see yoga or sensitivity-awakening exercises taught nationwide to young children as a prelude to creative writing. First, I have apprehensions that the techniques may be misunderstood and misapplied; second, I have doubts that such exercises performed in a group will actually carry over to help a child become the master of his or her potential creative energy when he or she is alone. Somehow, these exercises were never needed during centuries of great Western literature, art, and artistry. I have a feeling that what made that tradition flourish was something else: the cultivation of the capacity for assigning oneself tasks, for *willful labor*.

We hand out the paper, and they write. There is nothing evil in this, except if we fail to supplement it with more understanding of students' inability, sometimes, to write when we tell them to. The best single incentive to creative writing is a classroom atmosphere in which everyone knows he or she has permission to go off and write at any given time in the day. Maybe we need to dispense with the whole idea of poetry hours or at least to recognize once and for all that the urge to create may strike different people at any time. Why should one hour be more "poetic" than the next? We should talk with our students about the times and circumstances in which they feel most

comfortable writing to learn more about the range of individual response in this area.

Most important, I think, is the realization that writing is not just an act of techniques or skills, it is an act of *giving*. To tell another person your thoughts on paper, you have to feel generous. You have to feel in the mood to communicate. And when you feel in that mood, how much better it comes out! Who doesn't like to give when in a benevolent mood? Then generosity becomes the healthy exercise of muscles that cry out to be used. But, on the other hand, nothing can make people stingier and more tight-lipped than the feeling an admission is being forced out of them before they are ready to make it. And writing is an admission. The same person, resentful when pushed into hasty self-exposure, would turn around and be happy to tell the very same thing if only he or she had been allowed to select his or her own moment. The best we can ask of ourselves as teachers is to learn how to sense that ripening process in each student: to know when an individual is closed off and would be better left alone and when that individual is ready to take another step. As Shakespeare once said: "Ripeness is all."

10 Story Workshop: Writing from Start to Finish

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You can identify the Story Workshop® method of teaching writing by its structured, flexible time-period format; by its theory of seeing, voice, movement, and Basic Forms and Sense of Address; by its repertoire of oral word, oral telling, oral reading, writing, and recall exercises; by its semicircle format, which heightens and facilitates the group process and the sense of audience; and by its teaching approaches, techniques, strategies, and tactics made possible by the exercises and their many variations. Used in class sessions and in one-to-one tutorial sessions, the Story Workshop method assumes that all forms of writing derive from image and story, from image and movement of voice (combined with the inbuilt sense of address in Basic oral forms) organizing the expression of perceptions through time.

Before there was writing, there was oral telling.

Two essential Story Workshop terms are *seeing* and *voice*. Seeing is visualization, conceptualization, abstraction, but it is also, and begins with, seeing in the mind as clearly and with as much impact as one sees in a vivid dream. Because of seeing-in-the-mind, human beings are able to conceive and anticipate the space and time and other relationships that they need and desire so urgently to communicate to other human beings. Strong, vivid seeing produces a precision in speech and gesture, which connects dynamically to writing.

Speech is a way to voice, speech is a part of voice, but voice is more than speech. Voice is gesture, voice is culture (including the personal background of the teller), voice contains the powers of the unconscious and the conscious and the possibility of style. Voice is also the movement of a telling-writing through time, the economy of which is to use only what it needs. Voice is the articulation of all perceptions

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in verbal expression, written and oral (including the so-called non-verbal which we want to get into writing too).

The Story Workshop Basic Forms and Sense of Address approach (not specifically discussed here) uses strongly defined oral and other Basic Forms to lead into many kinds of writing. The most clearly identifiable structural elements of a Basic Form are those that make it most useful in eliciting and organizing oral and written expression. All Basic Forms contain an inbuilt sense of address, an inbuilt sense of telling it to someone. Each Basic Form step provides technical, scientific, factual, journalistic, rhetorical, poetic, and fictional choices. Each choice shows elements of the others, and each may combine with the others. When incorporated in a sequential Story Workshop structure and format, in which learning process development is coordinated with the evolutionary development of verbal forms, the Basic Forms and Sense of Address approach provides direct steps into technical, scientific, factual, journalistic, rhetorical, poetic, and fictional writing. With seeing, voice, and movement, Basic Forms and Sense of Address constitutes the third major dimension of Story Workshop theory.

Story Workshop activity and its success suggest many questions for research into the process of composing. These may be derived most clearly from concrete examples of Story Workshop activity.

Physical Format of the Story Workshop Class

In a Story Workshop class, the students, up to eighteen of them, sit in a well-defined semicircle facing a director who usually sits against a wall or other backdrop. Versions of the Story Workshop class can be carried out in other seating arrangements, but the semicircle accomplishes an immediate sense of audience, a situation in which you can be physically aware of everyone else at least on the periphery of your vision. It enables each participant to see every nuance of facial and bodily expression while hearing the voices of the other participants. For the director and the students, it is the most efficient arrangement for listening to and conducting the Story Workshop exercises.

The Story Workshop method provides many ways, by relating oral word to telling, reading, and writing exercises, for people to solve linguistic and perceptual matters on basic and on sophisticated levels. Indeed, the students in the semicircle face a director who has had considerable Story Workshop experience and, for best results, should be an active writer.

Ideally, the class meets in a series of three- to four-hour sessions,

perhaps weekly, over a period of time. However, intensive workshops meeting four or five times a week for three weeks have been conducted successfully. The basic sequence of effort in each class proceeds from beginning recall, through oral word exercises, oral telling exercises, oral reading, and writing, to ending recall. Students accustomed to shorter class periods and lectures, and teachers accustomed to doing most of the talking, may consider this a long time. But in fact the kind of effort pursued in a Story Workshop class usually engages attention throughout the time period. The Story Workshop method can be used within shorter time periods, and with larger groups, but to develop its full power it needs the longer session. The format is quite flexible, and any form of teaching may be used within it. Story Workshop methods can be directed toward poetry, reporting, exposition, argumentation, and technical writing by specifically focusing telling, reading, and writing exercises on the development of those abilities.

Beginning Recall Exercise

At the second meeting of the semicircle, the Story Workshop director first directs the recall of the imagery, events, tellings, words, sights, readings aloud from the previous session. Recall of assigned readings may be conducted, and recall may be used in other ways toward several goals at different times. In an early session the director usually concentrates on the primary form of recall, generally termed "exact" recall—although it is seldom "exact."

In recall the participant sees and retells, for instance, an image, an event, a moment so that it is experienced and discovered again. It is a creative exercise that aims at both "exact" recall and imaginative recall in the participant's own words and seeing.

You coach the semicircle before you: "What do you remember that is particularly clear? See it again, tell it again, as if it's happening right now!" If students say they remember nothing, you may ask for "anything at all" or you may start the recall yourself.

A student responds: "Somebody rode down the street on his bucket," which is not clear recall nor imaginative recall; we do not see it specifically and do not learn much about telling and writing. But perhaps it stirs the memory of others.

Another student uses both hands to tell how Kafka's bucket rider (from a story read the week before) gripped the handle and sat on the bucket. The student, a young woman, gives a dipping and rising bodily motion along with her words to tell how "the bucket rider rode

on his bucket, and rises as high as third- or fourth-floor windows and never sinks lower than second-floor windows." Frequently, compelled, precise gesture accompanies clear recall. The more clearly participants see the recalled images, the more they tend to move into the present tense. *The director should usually coach for present tense recall.* Most oral tellings are best accomplished in the present tense, while the past tense remains the "natural" narrative tense in writing. The two translate easily when the director is aware of the connection and therefore makes the student aware of the "bridge" between present tense oral telling and past tense written telling.

Another student recalls: "There was a man all shot up against a tree," and again it's not specific, not imaginative, and not illustrative of telling and writing principles.

The director coaches the semicircle: "See it! See it happening now! Tell it as if it's happening again right now!"

A student on the other side of the semicircle tries: "The man against the tree lifted up his coat . . ."

"Give the gesture! See it and give it in the present tense! He is . . ."

The student gestures, lifting a coat with both hands from his lap, ". . . and shows his entrails spilled out over his knees, and the pulsebeats are visible, pulsebeats in the guts, I guess . . ." The student flutters the fingers of both hands to indicate the pulsebeats through the spread of the man's entrails over his knees, in Isaac Babel's story. People in the semicircle always react sharply and visibly to such a strong image, and the tellers are enriched by this natural response and reinforcement of their effort.

If you allow discussion before and during recall, you usually do not get the strong recall that reinforces the imaginative learning experience and its discovery possibilities.

In recalling an oral telling from a previous session, a young man says: "There was a spaghetti monster who soaked up garlic." That serves to start the recall of this monster image event, and everyone smiles, but the students see and tell it more clearly when the director coaches them to see it and give the gestures. "It was a monster disguised as a meatball and it soaked up the garlic in the sauce . . ." The student gives a gesture of the monster disguised as a meatball inside the pot of sauce on the stove with spaghetti drooping over its head, taking hold of the lip of the pot to peer over it and ducking down to hide when Mama Minelli comes into the kitchen. Now in the immediacy of seeing, the teller of the recall shifts to the present tense: ". . . so that when Mama Minelli tastes the sauce [gestures of Mama Minelli reaching up to a shelf for a wooden ladle and dipping

and tasting the sauce] and there is never enough garlic, so Mama Minelli reaches up [again a gesture of reaching] for a clove of garlic and twists it over the pot . . . " Other students join the recall. With a gesture of Mama Minelli twisting a clove of garlic, the young man continues: " . . . and stirs, but again the garlic monster, disguised as a meatball, soaks up the garlic so that when Papa Minelli comes into the kitchen and tastes the sauce there is not enough garlic, and he twists a clove of garlic into the pot too, and so on with each member of the family, until the big dinner . . . "

The exercise continues with recall of dream tellings, short images, readings, anything done in the previous class.

The Word Exercises

The director moves the class into the oral word exercises. But let's go back to the first time that the group attempted a word exercise, One-Word, so that a basic principle of Story Workshop activity comes clear, the principle of reaching immediately past superficial, direct associations to get a response from deeper levels of association. The participants do not deny their direct associations or their use but reach past them.

The One-Word Exercise

The first words given in turn by participants in attempting the One-Word exercise are, almost without fail, directly and superficially associative by sound, meaning, conjunction, opposition, sight, etc.: love . . . hate . . . ambiguity . . . cloud . . . clutter . . . climb . . . sky . . . airplane.

If the director only coaches: "See it!" a certain seeing occurs but the association stays superficial: waggle . . . tail . . . deer . . . cage . . . clutter (again).

Now the director coaches: "Listen to each word given! See and continue to see whatever is suggested to you by words given previous to your turn! We can do two things at once! We can skip rope and chew gum. We can do more than two things at once! Push aside the words given to you by direct association and go for the surprise word, the unplanned word, the word not prepared or ready before your turn, the felt word, the word welling up." Both a sought response and a spontaneous one, the surprise word, like the fabled right word, may flash at once, or it may take some finding or letting happen.

Now the character and quality of the word responses change and

so does their impact upon the listeners: pillow . . . personality . . . hornet . . . ear . . .

"Push aside all direct associations! Let the surprise word happen!" the director coaches. Scrubbrush . . . fiery . . . tomb . . . glycerine . . . preen . . .

"See what each word gives you to see! Now listen to your voice!" (The latter is a most powerful coaching instruction.)

The participants' attention turns strongly inward as they listen to their voices, and at the same time their voices become certain in giving the word. The word and what it suggests are felt and seen more richly by the listeners. Mumblety-peg . . . solar system . . . enclose . . . peek . . . Now the participants experience the One-Word exercise with imaginative perceptual and linguistic responses evoked on many levels.

The imaginative state of mind that grows for participants during the course of a Story Workshop meeting may come about quickly or slowly or erratically. It requires development. The Story Workshop director, from his or her point of view in front of the semicircle, notices it becoming present by changes in the quality of the words given. The giving becomes clear, the listening intent, the words more evocative. An intentness comes upon the participants, sometimes a quickness, sometimes a slow, deep involvement in response. From the participant's point of view, a sense of spaciousness and privacy within the semicircle deepens and widens, inwardly and outwardly.

If you are the participant, you begin to *see* many sights, memories, dreams, conceptions. Some of these stay with you and grow into images or movements of imagery. Participants respond to the director's instructions and suggestions of sources, forms, kinds, and principles of content. The perceptual-intuitive and the analytic work immediately together. For instance, the analytic is immediately present to perceive and abstract the essential relationships in primary seeing and gestural-voice telling, or else human beings would never have been able to give the instant, clear communication that they needed. (The reflective-analytic reflects upon nothing unless the content and presence of the perceptual-intuitive live immediately before it. The splitting of these and the inculcation of this division are the least rewarding examples of behavioral prevention in our general educational experience. In fact, much of what is called analytic in our educational jargon is judgmental, frequently exercised without any prior process of the perceptual-intuitive and the reflective-analytic.)

Events of imaginative seeing and voice become probable. Sometimes an imaginative event may boil up with such power that, as a

participant, you can hardly hold it, and you hear someone else's telling with only one ear. Yet you really do hear with this one ear.

From the imaginative state, you tell an image. The director instructs you to focus upon the sight of your telling. If you become fully absorbed in the sight, voice, and movement of your telling and in the director's coaching, your concentration usually causes you to lose sight of the semicircle, of the room, of any physical world about you, or you see it in a blinkety-blink way. The director may even coach, "Keep your eye on 'it,'" rather than on the director or the semicircle. Your exclusive concentration upon your telling usually attracts the clear listening of the others in the semicircle, which suggests the presence of an Internalized Listener to which the director relates with coaching, an important point in researching the composing process.

Oral telling in a Story Workshop class differs from ordinary speech. It draws upon speech, and certainly it draws directly upon physical voice, but you cannot ordinarily achieve the imaginative event or the imaginative state of mind of telling by discussing or talking or speaking conversationally about something. In fact, judgmental discussion (and "sharing" discussion too) not properly timed undercuts the imaginative-analytic state of mind, though at the right time it may point toward it. The Story Workshop director instructs participants to save discussion for an appropriate time. Usually the process that would not have continued if the discussion had occurred answers the participants' questions.

Writing differs from speech and from oral telling, but writing at its clearest and most effective proceeds from physical voice, from the immediacy, extraordinary precision, and variety of physical voice (including gesture). Writing is an extension of seeing and voice into another medium with important differences of possibility and development that nevertheless appear to gain content and quality from the basic sources. Oral telling, as practiced in a Story Workshop class, moves physical voice into another medium where it can be apprehended by a reader.

A Story Workshop director cannot be simplistic about what he or she does, because the Story Workshop method draws upon all the sources of creativity and intelligence. The director should grow in awareness of the ways that the myriad inklings and risings of perception and voice repeat themselves from one person to the next and yet come as a surprise and as an event with unique characteristics for each person. The authority, guidance, and acceptance of the director, joined with emerging leadership in the semicircle, generally

assure the achievement of the imaginative learning process. Usually a "leader" emerges in a group of twelve to eighteen people, or a combination of persons evolves that acts as leader.

In a Story Workshop class, everything that happens is potentially of use to the director, the individual participant, and the group. Thus, the principles or "rules" are valid when the exceptions to them may also be valid, at some time, in some place, with some person, and potentially with every person in every time and place. At the same time, the contradiction is valid in relation to the basic principle. As director, you become more aware of a complex process as you incorporate the principles, make them your own, and use them in your own way.

The director's phrasing and timing of instructions obviously suggest principles and directions for writing-telling effort. You devote a variable amount of time to each part of the Story Workshop format, to oral word exercises, oral telling, oral reading, and in-class writing exercises. At any moment, when *seeing*, when the imaginative state is present in the group, the director can choose to move the class into telling or writing or reading. The director may ask for a few short images evoked by the words given in One-Word. But almost certainly the director and the class move on to explore other word exercises. Each exercise radiates with multiple purposes. A Story Workshop director never does anything for only one reason.

The Take-a-Place or Place-Object-Verb Exercise

The workshop usually plays Take-a-Place after One-Word. The use of at least One-Word and Take-a-Place is an essential foundation for the session. Take-a-Place requires three or four points of concentration and accomplishes many things at once. Usually the director instructs an individual, or all of the individuals in the semicircle, "Take a place. See a place, a place you know, a place you imagine, a place you remember, but in any case a place you see! Right now! See it! See an object in the place and give it! Look right at it and listen to your voice as you give it!"

Lamp post . . . wind chimes . . . doll . . .

The director chooses one student, because of the quality of seeing and awareness of the student's object, to give objects from his or her place one at a time: "The unqualified, unmodified object! Bridge! Rather than broken-down Roman bridge! Because *bridge* allows each person to see his or her unique imaginative sight of bridge." There are useful exceptions to this rule, but the modified object usually limits the participant's unique imaginative sights. It is usually

stronger to proceed from the general, *bridge*, to the individual's specific bridge.

The student chosen gives an object, say, "mirror," and the persons in the semicircle see their individual sight of mirror, and each in turn gives a *verb* response to it. "Mirror" is an object that attracts immediate cliché responses; but if coached well, it secures deeply imaginative responses. In the semicircle listen to each verb response from other participants before your turn, and see any sight suggested by each response. You keep your concentration on your own sight of "mirror" at the same time. Then when your turn comes, concentrate on your "mirror," push away verbs given by direct association with the object and with previous student responses, and respond with a surprise verb from a deeper source. So that instead of superficial responses to "mirror" such as reflect, see, shine, distort, waver, we get: float . . . douse . . . struggle . . . tempt . . . envelop.

Such responses strongly suggest many imaginative and linguistic possibilities, which may be directed into tellings and writings or may come to a writing result simply because the participants' seeing during the exercise compels them. Take-a-Place helps many students identify verbs and their functions, which leads to increased ability in writing a sentence. It also increases the individual participant's awareness of other people in the group, bringing the group into a more unified effort. A more sophisticated version, Three-Instance Take-an-Activity, may be used to develop Basic Forms patterns.

The Three-Words Exercise

Now the director may move to oral telling or oral reading or writing; but he or she may also move to other word exercises, perhaps to Three-Words. The first time you, the director, introduce the exercise, you may begin simply by saying, "Give three surprise responses in succession, pushing away direct associations each time, and let's see what happens." In subsequent attempts, you coach the exercise more closely and toward greater, more subtle results: "Give three surprise responses, but seek, feel for, a connection, a movement, of underlying voice between the words, a sense of underlying meaning. There's something unique about the way the words of Melville, Virginia Woolf, Faulkner, or any good writer follow each other. Seek the underlying voice that makes sense of everything else."

Many poetic and linguistic opportunities can be heightened in Three-Words: textures, juxtapositions, alliterations, and so on. Three-Words emphasizes certain important principles of rewriting—other word exercises can be directed toward this goal too—so that

the teller discovers that rewriting is retelling, responding with a living, seeing, perceptive feel for the telling-writing.

"Play it over!" the director suggests, making a musical analogy. "Try for a different third response. Give the first two words fully again, pushing away all direct associations, and respond from that underlying, deep sense of voice, following a movement from the first two words."

So that: bugle . . . silk . . . magic

becomes: bugle . . . silk . . . tangerine.

Tangerine has more magic!

The Sensory-Verb Exercise

In another word exercise called "Sensory-Verb," you, the director, take suggestions from the semicircle of certain words specifically and strongly suggestive of sensations. Or simply offer one yourself, such as *sour, sting, shiver, sweet, glare, shimmer, whine, acrid, smooth.*

You pick *sour.* You coach a student to look down, concentrate on the sensation suggested, on the abstract sense of the sensation, if possible, with a distance perceived between it and the perceiver in the perceiver's mind. You tell the participant that you will coach him or her to apply each sense to the sensation and respond each time with a verb. (The participant performs the exercise on a level of responding to the direct sensation too.)

"When you have a strong sense of sour, nod your head."

After a moment, the student nods.

Then the director coaches the student to "See it," "Hear it," "Touch it," "Taste it," "Smell it" in whatever order perceived to be usefully surprising, eliciting a verb response out of each sense before moving to the next one. The director instructs the rest of the workshop to do the exercise silently and later asks for some of their silent responses to be given aloud.

A sequence for one participant concentrating on "sour" went: wander . . . pulse . . . sparkle . . . harden . . . tempt.

Objects may be used instead of sensations, and other applications of the exercise are apparent. The exercise strips clichéd phrasing from perceptions. If you can't get the right word or phrase in one sense, go to another sense: "Hear the sunset." "Smell the sound." Perhaps the sense of smell gives the seeing, perhaps touch gives the sound.

The repertoire of word exercises (and their many variations) includes another important basic exercise called Individual/Verb-

Action-Verb, but only a few word exercises can be carried out in any one workshop session.

The Oral Tellings

When you move the workshop into oral tellings, you may ask the participants to give sights or images suggested by any words previously given in the word exercises—from memories evoked, from dreams, from imaginative combinations, from anything—but in any case *from the imaginative moment of seeing right now.* In a beginning workshop it's a good idea to achieve quickly an understanding of principles of the short image, of the "relationship between something and something else, of the man rocking in a rocking chair and the rain roaring on the tin roof above him, and the man's lips twitching with a smile to himself." You, the director, use gestures to suggest the spatial and other relationships in an image.

Many simple directorial coachings alert the teller to basic principles of image and communication. Examples: "See it!" "Listen to your voice!" "Look at *it*!" Because if the student looks at the director or at anyone else in the semicircle for approval while telling, it diminishes the sight and its sense of space. The vividness of seeing itself may pull the student's eyes away from looking to the director for approval.

Image Tellings

Here a woman tells from the suggestion of the word *photograph*:

> A young woman sits on a sofa with an album in her lap, looking at a snapshot. [Gesture of holding the snapshot between thumb and first finger rather delicately.]

But nothing much is happening. The director coaches: "What do you smell?"

> Through the open windows of the living room beside her comes the smell of fertilizer just spread on a neighbor's lawn.

The sense of seeing and space and life in the growing image pleasantly startles the rest of the workshop because now they *see* it too. The director coaches the teller: "Give a sound far away and a sound close in."

> A mixer is going in the kitchen where the girl's mother is mixing a cake, and, also through the open windows, comes the sound of a bus stopping at the corner of the street outside. It's warm. The girl takes a breath, blows it out carefully [gesture of small *o* with lips], and turns the page of the album.

The quite simple telling reaches a moment of suggestive mystery and emotional tension. The director may ask, "What's in the photograph?" Perhaps the student continues it in writing, perhaps it suggests something else in principle and in content to others in the semicircle. A man responds:

> A cemetery and, at the end of it, a Budweiser sign flashing on and off . . . [The teller gives two important gestures, one to indicate the end of the cemetery from his point of view and the other, an opening and closing of his hand, to indicate the flashing of the sign on and off.]

In order to evoke different kinds of short or long images, the director may ask for images or objects from a dream, objects from childhood, objects you can hold in your hand, and so on.

Here are a few examples of different kinds of coaching that help accomplish perceptual discovery and the words that tell it:

> A young woman, very emaciated, very thin, lies underneath sheets in a hospital bed. A man, sitting in a chair beside the bed, holds her hand in both his hands. She's dying . . .

The teller, an older man, begins to take a vague, summarizing approach. The director coaches, "What do you touch, smell, hear?"

> Her hand feels cool, not right to him. She's talking constantly, and her voice is weakening. The smell of ether is strong, everywhere, in the corridor, in the room. The man feels desperation . . .

The director coaches: "Where does he feel it physically?"

> He feels numb, pain in his stomach, he can't think of any right responses to her. He's most conscious of her voice getting weaker and weaker.

The director may ask for short sights suggested by a sound (or by a smell, or a touch, etc.). A short "sound image" such as that of "blood dripping into a face bowl" may become a longer image.

"Stand back away from it. Let it expand. See it. What happens next?"

Longer Tellings—What Happens Next?

A longer telling that was eventually written:

> Lyndon Johnson goes into his bathroom in the White House with a towel wrapped around his waist, carrying the hot-line phone, which is attached to a long wire. It goes with him everywhere he goes. He puts the hot-line phone down . . .

The gesture of carrying the phone gets the teller into Lyndon's point

of view, with a strong suggestion of earnestness and the slightly helpless bumbling that goes with it. In the telling the audience sees Lyndon from the outside and also identifies with his point of view, and the laughter is that of recognition.

"See it! The hot-line phone! Where does he put it?"

> He puts it on a small platform clamped to the tub. He unwraps the towel and steps into his big bubble bath, sinking down with a sigh [the teller gives a gesture or suggestion of bodily expression with each sight]. And the phone rings. The hot-line phone rings . . .

The teller looks at once surprised and entranced. The director recognizes the look and knows that the teller hears and sees the phone ringing. The director coaches: "Keep going. Let it happen. See it and let it happen."

> Lyndon grabs it and the receiver slips out of his bubbly fingers and falls into the bath [the workshop laughs]. He scrambles onto his knees in the tub and saws the line up and down, pulling the receiver up.

The teller stops, with a wild look, and again the director coaches: "See it. Let it happen. Keep going."

> He cradles it to put it to his ear [the teller crouches slightly in his chair to suggest LBJ on his knees in the tub and looks down at the receiver, seeing it from outside LBJ and also taking LBJ's point of view] and bubbles start coming out of the earpiece. He can't hear what the message is. It must be important. It's the hot-line. He stares at a bubble puffing up and when the bubble breaks a couple of words come out: " . . . is it . . . " Another bubble breaks. A couple of more words: " . . . you, Mr. President!" But now there are many bubbles piling out of the earpiece, and the message is fragmented. He starts poking with his finger to break the bubbles and get the message faster and more coherently . . .

(The complete telling can be read in Play I in *The Story Workshop Reader* [Columbia College Press, 1976], in which some participants' writings from Story Workshop classes are collected.)

In fact this telling was a retelling, or a reformulation and a retelling of a piece of writing about LBJ in a room made of peanut brittle. The student had come in late from staying in the college's typing room to finish the piece about LBJ. Sharp with him for being late, the Story Workshop director pointed at him for a telling just as he bent to sit down in his chair, gaining the impact of the unbalanced moment. Radically different from the original writing, and wonderfully more imaginative, this telling illustrates the use of going to the imaginative sources for reformulating and rewriting and of the use

of the oral Story Workshop exercises in exploring retelling opportunities.

The director usually instructs students to tell orally in the third person and in the present tense. In conversational tellings in everyday life, people frequently use the present tense unconsciously to communicate with immediacy. For instance, a well-known linguist said to me on the phone recently, "There I am, riding along 55th Street on my bicycle and a man opens his car door in front of me and sends me ass over tea cup . . ."

A Vietnam telling: a patrol, crossing a river, receives fire; and then ten minutes later, walking through elephant grass ("when seven men have walked single file through elephant grass, there's a path"), the sergeant sees a couple of quick movements around a hooch. [The teller kept slipping into the first person and past tense and losing the distance, which made the seeing possible in the third-person present tense.] When the soldiers reached the hooch, they found an opening, with steps cut in the dirt, of a bunker dug beneath it, probably containing the people who had fired on them. [The director coached the teller frequently and vigorously to make the effort to stay in the third-person present tense.] When the medic squatted by the opening with a Vietnamese-English card in his hand and shouted down into the bunker for the people to come out, there was no answer. He tosses a CS grenade into the bunker, and smoke drifts up through the opening and through holes in the side of the hooch, revealing firing holes for weapons that the soldiers had not seen until this moment. Now sounds come from down there, coughing, sniffling, a baby crying . . . Two participants in the semicircle reacted strongly (and almost immediately at this point) against the telling, trying to stop it because they realized the soldiers would "frag" the bunker, and there would be "just meat down there." Strong "breakthrough" material in almost every workshop will be experienced ambivalently in some way by some participants even though its reverberation eventually aids their writing progress.

The teller depended upon the director's use of authority, and upon the supportive listening of others, to make it possible for the telling to continue, for the imaginative state of mind to be present. Most of the workshop participants listened raptly and were moved by the profound ambiguity of their feelings of recognition in hearing it. Many such Story Workshop experiences suggest research into writings where the group decides the content and quality and into writings where the teacher-director exercises permission and authority that extends the range of the content and quality.

Dream Tellings--What Happens Next?

In dream tellings Story Workshop coachings also emphasize third-person present tense in order to achieve immediacy and the distance of seeing—of being able to see—and the permission to let the dream happen fully and perhaps trigger a longer imaginative movement. The teller may write it in first, third, second person and probably write in the common "narrative" tense, the past tense, even if the oral telling was in third-person present tense.

> A man is looking earnestly, with a sense of danger, for the "unreal" object in a cluster of objects on a desk in front of him. [Teller gives eye movement of man checking out the objects.] Pencils. Blotter. Ink bottles. Clock. Paperweight. A rack of pencils. He's got to find the object that looks like a real object but is in fact the guise and hiding place of some other kind of being.

That was as far as the dream went, and the teller appeared to be finished. The director sensed the potential dynamic of a story. "Concentrate on this sight now, and let a new sight develop." This instruction can introduce the "What happens next?" principle clearly.

> He reaches out suddenly and picks out a yellow pencil [the gesture is precise: the man holds the yellow pencil in his left hand while he gets out his knife with his right hand] and with the point of his knife slits the pencil down the side, down to where the lead would be, but instead out oozes the guts of the hidden being . . . .

The director asks out of his own curiosity (an important principle of well-trained coaching): "How does he know that an object is unreal?"

> He knows, he knows—ah, he finds them by smell, they have just a faint smell of burnt hair. You would think, to look at it on the shelf of the cupboard, that this is just an ordinary can of paint thinner . . . .

Abstract Telling Exercises

Many oral telling and writing exercises move not from the specific impression but from the general and the abstract, from concept and form and principle, to the imaginative event. These include such generals as monsters, Person-Action-Person, Person-and-Object, imaginary societies, parody or retellings of strongly defined basic forms which incorporate a clear sense of address, I-you or small group-you (folktale), What's-the-story-about? and so on. Specific and general approaches are not mutually exclusive. They work very well

together. It broadens and heightens the potential of a class to use both.

When introducing an "abstract" exercise, the director usually devotes some time to talking about the principles of the exercise and giving a few concrete examples. The "abstract" word exercises—and the other abstract exercises—can be directed into highly imaginative, profoundly felt oral telling or writing. The abstract exercises "bridge" from the general to the specific, just as the Story Workshop expository steps usually "bridge" from reading to oral telling to writing. (The latter transition requires a separate, full discussion.)

"See the monster at work!" the director coaches. "See him getting somebody!" In monster and other imaginative tellings that proceed from "abstract" or "general" suggestion, perceptions of common naturalistic and realistic relationships of all kinds become vivid and precise. "See what the monster sees! See it from his point of view! What happens next?"

The director's coachings enable the teller to get into the point of view and to see it so that the audience can see and respond to it. Vivid monster tellings occur: the toilet monster, the fishing lure monster, the sidewalk monster, the garbage monster. Most students also write strongly during a "monster" session.

Sometimes in the writing the teller goes back in time to explain how the image occurred, instead of letting the central, catalytic image generate the movement of the imaginative event. In the writing of the telling, the piece comes alive when it reaches the material of the original telling but then does not go beyond it. A common error is to spend the writing effort in trying to explain how the image came about, its prior history, rather than to go with the energy and movement, although there are occasional exceptions to this nearly general rule. (See "The Stalk of the Wisconsin Squonk" in *The Story Workshop Reader* for a story where the ending image was the catalytic one told orally in a Story Workshop class.)

The In-Class Writing

Directly after the general oral telling period, the director may lead the group into an in-class writing exercise, but perhaps the director reads—and has a few participants read—a strong passage or story first, particularly in a beginning class, to accomplish the connection of oral telling to reading and writing. This reading gives an immediate experience of an imaginative event where all principles of seeing and telling come together. The in-class writing may also be done toward the end of the class after the longer reading period. If

done directly after the general oral telling period in the middle of the class, more time may be devoted to reading some of the writings aloud. The reading aloud of the in-class writing to the immediate audience frequently carries the students dynamically into the full writing process.

A specific telling exercise may be used for or may lead into the in-class writing, or a specific reading may be explored for writing possibilities. Dreams, events, or memories may be specifically assigned. Or the director may suggest that the students take something from the word exercises or the oral tellings or perhaps something the students didn't get a chance to tell that still feels strong to them. The director can put a short time limit on it ("Five minutes!") or let the writing go for a longer period. Over the period of a school term, the director may begin extending the in-class writing and "read-back" period, because in this exercise everything discovered in the class moves readily into writing.

The director usually coaches the in-class writing in ways similar to the coaching of oral telling: "See it and tell it to the paper." "Get the sense of telling it to someone right at the beginning." "Let your pencil be an extension of your voice, an extension of your seeing." "Listen to your voice, for your voice." "See the imaginative event. Let it happen." "Write not knowing necessarily what's going to happen next. Write knowing some of what happens next but not necessarily all or any of it." "Tell it as fast as you can, as clearly as you can, as fully as you can. We'll read some of them here in the class." You change your instructions to meet just about any contingency or point of writing concentration. You seek to gain and enforce a focus of concentration without proscribing any possibility.

You may coach participants to change points of view from first to third person or third to first; to switch from one character's to another's point of view; to perceive "catalogues" or sequences of objects or actions; to change tenses; to change forms; and so on. You may coach for just about any principle essential to the form or address or development of almost any kind of writing. You may coach students to keep on writing when they try to stop.

Often students will come to write readily and capably in class, while they still resist writing alone outside the class. The state of imaginative seeing—an integrated readiness of voice, movement, and seeing—makes the in-class writing more accessible to the student. This "habit" of welcome and readiness begins to develop alongside, and to penetrate and break up, the "habit" of resistance. (This welcome-resistance attitude toward the activity of writing may pique the interest of certain researchers.)

The tasks that one perceives, sets, accepts, discovers for oneself bring about the greatest realization of one's abilities. The Story Workshop method should facilitate and provide a *context for such* choices.

In the in-class writings, many minority students first test their vernacular, their cultural content and attitudes. A young black writer told the director that he looked around the semicircle and in his mind's eye and ear tested persons in it for their reactions to words and phrasing in his in-class writing.

Because of the heightened concentration of the Story Workshop period, and because of the director's coachings and the anticipation of immediate audience response. the in-class writing most frequently shows perceptual and linguistic discovery before the writing that the student does outside of class and hands in weekly to the director. When these in-class writings are read aloud in class, the effectiveness of the Story Workshop audience reveals itself, contributing a thrust to the group's and the individual's progress. Here the students discover, and the director makes explicit, the connections between the work performed in the oral exercises, the reading aloud, the in-class writing, and the writing done outside the class. Usually students accomplish their first breakthroughs in the oral telling exercises, next in the in-class writing exercises, and then in the writing done outside of the Story Workshop class.

The In-Class Oral Reading

The director devotes fully one-fourth to one-third of the class period of four hours to reading aloud, coaching the students toward a clear reading experience. In the reading chosen for this period, and in the assigned reading, the director keeps before the students a wide spectrum of writing possibilities and forms, of different voices and kinds of seeing—stories, poems, factual pieces, novels, scientific observations. You select readings that demonstrate that nothing human is alien to writing. You select readings that guide a particular development of the class, theme, or goal.

Few students know that the reading aloud experience can be tremendously stimulating, enjoyable, instructive, replete with discovery possibilities. The director's own reading aloud to the workshop communicates strongly every level of his or her appreciation, excitements, and perceptions. The students also read aloud, coached by the director, and if possible, particularly in beginning classes, each student reads aloud each session. In the oral reading the students hear their voices join the many voices of the common English language. Initially the student probably reads aloud too fast, and the

quality of the imaginative event of even the finest writing becomes dim and hurried. In order to achieve the discovery of the ways of telling a story in the student's perception and voice, and the discovery of the student's voice and seeing too, the director coaches the reading.

The chapter "Stubb Kills a Whale" in *Moby Dick* offers an excellent example for in-class reading aloud in which all principles of seeing and telling come together. The director first hands the book to a student chosen probably for responsiveness, though you obviously want everyone to read aloud. The student takes the director's chair in the front of the semicircle, which brings about a heightened sense of audience, and the director takes the student's chair in the semicircle, so that the director coaches the reading from the vantage of listening to it from the semicircle's outside point of view. Or the director may pass the book to a student in the semicircle and have the student address the reading to another student in the semicircle, "Dear so-and-so . . . ," to develop primary awareness of the sense of address.

"Read each word, word after word, see everything there for you to see—objects, people, actions, everything," the director coaches. "Give each word fully, listen to the story in your voice."

> If to Starbuck the apparition of the Squid was a thing of portents, to Queequeg it was quite a different object.
>
> "When you see him 'quid," said the savage, honing his harpoon in the bow of . . . .

"See it! Everybody see him honing his harpoon in the bow of the boat! And slow-w-w-w down!"

> . . . honing his harpoon in the bow of his hoisted boat, "then you quick see him 'parm whale."
>
> The next day was exceedingly still and sultry, ...

"Every word! Exc-c-ceeding s-s-still and s-s-sultry. Read each word!"

> . . . and with nothing special to engage them, the Pequod's crew could hardly resist the spell of sleep induced by such a . . . .

"That's it! Slow-w! Listen to the voice of the story in your voice!" The director makes a gesture to indicate something of how the student can listen to the story in his or her voice. "Listen to it as if from the outside!"

> . . . induced by such a vacant sea. For this part of the Indian Ocean through which we then were voyaging is not what whalemen call a lively ground; that is, it affords fewer glimpses of porpoises, dolphins, flying-fish, and other vivacious denizens of more stirring waters, than those off the Rio de la Plata, or the in-shore ground off Peru.

The director coaches to emphasize principles of image and movement and to gain the catalytic imaginative power of the audience's listening. In this passage you may coach for perceptive heightening of the sibilants *and give an undulating gesture for the* heightening of the prose rhythm.

> It was my turn to stand at the foremast-head; and with my shoulders leaning against the slackened royal shrouds, to and fro I idly swayed . . . .

"Everyone see Ishmael holding onto the shrouds [you stretch out your arms in a gesture to give the image of Ishmael] and see the ship rocking [you give a rocking gesture with your hand] so that the masts sway [give a gesture of masts swaying], and Ishmael sways back and forth with his outstretched hands gripping the shrouds . . ."

The director's firm insistence in coaching makes the achievement of the seeing and voice of the story possible.

> . . . to and fro I idly swayed in what seemed an enchanted air. No resolution could withstand it; in that dreamy mood losing all consciousness, at last my . . . .

"Exaggerate it! Exaggerate everything you see, feel, perceive!" This instruction usually heightens voice and image. Sometimes exaggeration parodies the story in ways rich with recognition and discovery. Usually it expands and gives variety to awareness of the seeing and the voice.

> . . . soul went out of my body; though my body still continued to sway . . . .

The director concentrates on listening to the story, and your coachings enhance the developing spell. You may whisper your coaching, gesture with your hands.

The class continues, with perhaps two or three more students reading aloud, and completes an exciting experience of the telling of the killing of the whale. Much comes clear about how-to-do-it writing too, the function of gesture in oral telling and in writing, how the whalemen chased and killed the whale, the sense of movement and imagery that tells what the people are doing.

The director should realize the necessity of repeating and varying these basic instructions with each reading and with each reader in every class period to make sure that the students achieve a heightened, clear experience of the reading materials.

For students well-trained with affected voices that prevent them from perceiving the story and hearing its voice, "Let your voice alone!

See and hear the story in your voice and let your voice alone!" is a principled instruction.

You frequently encounter a student attitude that the coaching must be intended as a "corrective," and the student shrinks, freezes, wilts, and generally resists the coaching until he or she realizes that the director aims the coaching to bring forth a potential that will always vary in quality of impact, rather than to correct the reading to some impossible, known "standard." You may find many ways to reach a more positive attitude in such students.

Basic coachings are: "Read each word, word after word. Give full value to each word." "See it." "Listen to your voice." "Listen to your voice as if from the outside." "Listen to the story in your voice." "Read each word, word after word, and trust that the sentence will end, will come to its own end." (This instruction often enables students to make sense of passages with complicated sentence structure.) "Be aware of what is happening right at the moment in the story as you read it." "Trust that the sentence will have its own shape, rhythm, movement, end, without imposing an end to it." "Exaggerate it." "Slow-w-w-w. Slow-w-w-w. Slower. Slow." Many coachings will direct concentration towards specifics in the story: "See the footman drinking from the glasses!" "Listen to the repetition of the esses!"

More demanding reading exercises are exaggerate, monotone, and dreamy-slow, performed in succession. It's easy for most participants to exaggerate the perceptions and voice of a story when reading aloud. *Monotone* and *dreamy-slow* are demanding trance-like reading exercises. Some participants have found *exaggerate* and *monotone* to be keys in the discovery of voice and movement in writing too.

The Story Workshop oral reading may lead to writing, may stimulate the participants' writing impulses. For instance, the passage of Richard killing the kitten in *Black Boy* evokes similar yet unique memories for nearly everyone. Vivid writing discovery may occur directly after such a reading. Students may also be guided to generalize and then move from their generalization to other specific events. If we read Blake's "The Mental Traveller," the transformation principle leads someone to write, as a young woman did, of an old man who goes to a refrigerator and takes out chocolate-covered pieces of girl; he eats a chocolate-covered earlobe. As he eats, he grows younger.

Participants may take the structure of relationships and movement of telling in a story and write another story. The universal principle in Gogol's "The Nose" is so clear that the part of the body

that becomes separated and audaciously independent can be the head, hands, eyes, voice, or the body itself. Frequently it's most productive to explore such possibilities in oral tellings first, then carry them into writing. This kind of retelling is imaginatively powerful and calls upon all of the writer's resources. The form of a story or poem or other piece of writing can also be effective in eliciting an imaginative event and suggesting a way for it to be told. Form possesses a power in itself for catalyzing and organizing perceptions.

Juxtaposed readings from literature can be used to compare approaches and evoke discovery of the similarities and differences in kinds of writing: time-distance relationships, points of view, metaphor and simile, different voices, and the like.

Outside Reading and Writing Assignments

The director gives outside reading and writing assignments. You assign books and pieces to be read, some of which will be read aloud in the class. It is important that the assigned readings be engaging, demanding of student capacity, illustrative of telling-writing principles, and possess the quality of eliciting the students' impulses to write. In Story Workshop practice, hundreds of readings have been found that meet these requirements and work with teachers and students of differing personalities and backgrounds. These readings, though not currently anthologized, should be treated as a library providing the most likely engagement of the students' seeing and voice. The content, range, kind, and variety of assigned readings warrant a separate discussion.

The director encourages the students to write every week. You ask them to finish writings started in the in-class writing exercise, to write dreams, events, attempts at stories, images, poems, observations, pages of words and image tellings, or any other kind of writing that seems appropriate.

You ask students to keep a journal. It should be a private journal, and students may soon find that the strongest censor is in their minds when they find what they are willing and not willing to put into the journal. To regard journal writing as prewriting cuts the writing process into pieces and diminishes the possibility that the journal writing may be valuable and complete in and of itself. A useful instruction is: "When you write in the journal, try to write in complete sentences much of the time. Raise your effort that much!" It heightens the discovery process in journal writing if we expect its quality to have the same degree of seeing, perception, and expression as any other form of writing. The director asks to see parts of the

journal that the student is willing to show and asks students to read aloud from their journals in the class. Three or four sessions, in which a variety of journal readings occur, heighten the quality of writing in the student journals and heighten the students' writing in general. Frequently the students' journal passages will be lively and full of possibilities, while their more formal writing remains flat and without content, effect, voice, seeing. You should point out the potential connection between the journal and the formal writing.

In in-class oral readings from journals, students' first choices of passages to read aloud frequently show less quality than the second choice. An experienced director-writer may begin to observe that a wariness and sense of risk about their strengths makes student put forward the "lesser" choice first. I have occasionally asked students to make a choice for a journal reading, and when it's made I ask them to make a second choice and then to look at the two and take the risk of reading the "stronger" one. You should usually have a second round of readings. In individual conferences with teachers who are not fully trained or experienced, you frequently see that the director-teacher picks the "lesser" choice from a student's folder of writings. The propensity of many students and teachers to make the "lesser" choice, and its effect upon the quality of effort and writing achieved, invites research. (See discussion of teacher-reflection in the section headed "Research Possibilities." This constitutes part of the research suggestion about the impact upon student writing of the teacher's ability to recognize good writing and the process necessary to achieve it.)

The oral tellings offer possibilities for the student to explore in writing and frequently result in complete stories or other pieces of writing. The participants should be guided into the struggle to discover and develop their voices and their capacities for perception.

You read the student's writing handed in to you weekly for possibility and for directions, for moments of presence, energy, clarity, insight, imagination. You keep the student's work for the entire term in order to have an overview of it and to plan the in-class readings of student work and the one-to-one tutorial conferences.

The time that many teachers of writing spend in red-pencil editing of student writing is almost always more productively spent in one-to-one conferences. You ask a student to rewrite a piece when the possibility of image, voice, movement, and presence is discernible in it. You encourage students to move on quickly to other writing rather than attempt to rewrite pieces without life in them. However, most writing is rewriting in one form or another.

The Story Workshop approaches to rewriting can be used in the class and in the one-to-one tutorial conference. Any useful, perceptive approach to rewriting can be included. You find that you go to the sources of seeing, voice, and sense of movement and form to retell/resense/reformulate/rewrite a piece, even to make the most sophisticated leaps of form, timing, and expression.

The Reading Aloud of Student Writings

Student writings are read aloud at the first sign of life in the writing, and a portion of most class periods is given to such reading, a portion that should increase in the course of a term. You should not wait for a perfect piece of writing. You should begin by the third week.

Here you select and identify the responses of seeing and voice emerging in the process and begin to identify effective writing and bring it before the class. The students see and hear their own writing and perceive the response of the others in the semicircle. They hear and see the work of other participants. Recall emphasizes strengths and clarity of all kinds in the students' writings, and the director usually deliberately avoids a critique discussion. (Specific exercises such as Recall-and-Comment and Recall-and-Question develop critique capacities with imaginative impact.) Here the capacity of the immediate audience to appreciate, discriminate, recognize, react in some way to what happens in writing comes through clearly to the writer. Also, the immediately responsive audience arouses deep impulses and eagerness to tell and write.

It is best to err on the side of reading too much student writing rather than too little. As the school term proceeds, a writing momentum builds from the dynamic relationship of the participant-writer to the audience.

Ending Recall

The ending Recall—"See it again! Tell it as if it's happening right now!"—can be one of the richest, most enjoyable times in a Story Workshop class, a time in which much reinforcement and further discovery occur, and the director and the participants experience a unity of effort and result. The director should usually set aside a certain time for the ending Recall. (See the earlier description of the Recall exercise.)

The Methodology of Tutorial Conferences

A principal Story Workshop tutorial exercise is that of the Juxtaposed

Readings. You take, let's say, the first page from each of three, four, five, or six of the student's pieces and arrange those first pages in an order designed to heighten and thus help you and the student explore patterns and emerging or latent strengths. You may not always see a pattern, and you can use the Juxtaposed Readings to find whatever is there. Then ask the student, "Read to me as to an audience, as to the workshop. Listen to your voice, and see what you pick up that comes through particularly clearly." Here you may enumerate the kinds of things that you mean or you may simply say, "what comes through particularly clearly for *any* reason." After the student reads the set of first pages in succession, you ask him or her to point out and read aloud the "particularly clear" sights, phrasings, passages, and the like that he or she recognized. You may have students bracket with a pencil those passages that come through more clearly than what's around them. You may ask other questions that are guided discovery questions for you and the student. Then you select second or third pages from the same pieces to be read in succession, then ending pages. Many combinations are possible depending upon the student's work and the director's perception of it. In fact, you will experience the best results if you use the Juxtaposed Readings exercise as a method of discovery for yourself and the student.

Be aware of the language you and the student use to identify the better passages. You may find that the more developed writer, when he or she says "I like such and such passage," identifies accurately those passages that come through "particularly clearly" or "more clearly" on that page or in that movement. But many students become judgmentally confused when they say, "I like . . ." In discouragement, uncertainty, and confusion, they declare, "Well, I don't really like anything here!" leaving it up to you. So it is crucially important that you coach most students: "I didn't ask for what you think you like or don't like. I asked for what comes through 'particularly clearly' or 'more clearly' in your voice, in your seeing, while you're reading it aloud to me. And anything else at all that you pick up, anything you remember, anything that happens in your mind as you read, anything you notice." Then many students begin readily to identify their better writing accurately. You can then coach them to move their effort in that direction.

To be able to set up a Juxtaposed Reading, you must yourself be able to perceive the distinctions in the student's writings. The Juxtaposed Readings exercise permits you to guide the student to discovery of certain matters determined beforehand, but it most importantly leaves the tutorial conference wide open to what the student and you perceive in the course of the exercise, which often enhances

and alters what you've otherwise prepared. You frequently find perceptions about the student's work that you simply could not have found any other way.

During the tutorial, you take notes on the observations and language the student uses to talk about the material (and about the process and potential of writing it). You can then use the student's own language, add Story Workshop language to it, and give the student your notes.

The Juxtaposed Readings exercise is a sensitive instrument, an exploratory, discovery exercise that can be guided to concentrate on ever more specific matters and also on wider matters in the student's writings.

You will always come up against a student who consistently identifies weaknesses and flat passages as "strengths." You should recognize first that this will be a pattern with a few students and ask yourself why it's happening. You should point out to them what you hear as their strengths and keep coaching for their recognition of them. This tendency of some students to make the lesser choice is similar to other patterns of students, teachers, and writers who put forward lesser choices as their first choices. In the case of some black students, it's easy to explain why they pick flat passages if those tend more toward standard English, while more vivid passages use dialect. You may coach the student to become more aware of the relationship of his or her voice to "standard" English. In other cases, a few students call strengths weaknesses and weaknesses strengths, which suggests another point for research. ("Clarity" can be used in place of strength.)

Many beginning writers—and writers in general—leave out of their writing that which is strongest, richest, most clear, ambiguous, resonant, moving—and methodically leave it out. A frequently productive instruction: "What do you see, what are you aware of, while reading the page aloud, that is part of the story but not in the writing on the page?"

In the tutorial conference, the Story Workshop director may ask students how they go about writing. "What were the ideas, images, intentions, and feelings you had when you started this piece?" Then the questions get more specific: "What did you see, what was the first image that came to you?" If the piece began in an oral telling, you may know clearly what you're looking for.

Story Workshop oral telling, gesture, and reading exercises are used by the director in these tutorial conferences too.

When students read their writings aloud, with the coaching and

guidance of the director they often perceive where the movement of a piece of writing actually begins. They discover and heighten their perceptions of what a sentence is, or paragraph, or the general organization of a piece of writing, at the same time that they discover and heighten their general ability to write. When they read obscure, confused, inadequate, or awkward and pretentious phrasings aloud, with attention to seeing and listening to it in their voices, they often find that these phrasings are not telling what they really see or what is really happening. Sometimes the student is reaching for a rich, strong, leading perception of relationship, image, or event and uses pretentious, awkward phrasing as a shorthand to avoid exploration of it—as a way not to lose control of its movement, not to be overwhelmed by possibility and unselected detail. One sure way not to lose control is to suppress movement almost entirely, which suppresses the discovery of the story; thus, the writer never achieves actual "control."

Students who seldom let themselves finish reading a sentence aloud without stumbling about in order to confuse themselves show a similar resistance to movement in their writing. When students resist movement in the oral tellings and readings, they usually resist it in writing. In some cases, such students try to control and circumscribe movement to the point of virtually preventing it from happening. In the Story Workshop "peer" tutorial program at Columbia College, in which advanced writing students are trained to use Story Workshop techniques and exercises to tutor students severely deficient in writing and reading skills, these students' difficulties in writing are usually reflected in their oral reading. When they begin to read more ably, their writing improves and vice versa.

Talk, conversation, anecdote, discussion, or exchange of any kind that the teacher perceives to be helpful is a significant part of the "self-discovery" tutorial too. And in any case the director will not leave hanging, just because they are not yet discovered, certain points that need to be clarified. You should direct, nudge, guide, explain, do whatever will work, to move students toward their strengths and the discovery of clarity and strengths, which begin to exist and grow alongside the old habits of avoidance, so that the strengths may be more frequently chosen.

Your responsiveness, your genuine excitement and pleasure in the student's writings should never be withheld. Students write more and improve more in their writing when the director is an active, discovering writer. The influence exerts itself in a thousand subtle ways, and in explicit ways as well, and show concretely in the amount

and quality of writing produced by a class. Most teachers stop (and students want to stop) or regard themselves as satisfied at a point in the students' development or in the writing of particular pieces where they are actually just beginning to reach the story, the potential of their seeing and their voice, the writing that they can actually accomplish. The Story Workshop director should be able to perceive when the student's partially successful expression and "almost" performance are not the full possibility. The deficiencies of many students in verbal skills training are quite enough of a problem for the students without adding a teacher's deep resistance to writing and lack of awareness of writing and of writing possibilities and priorities.

The Research Possibilities

Researchers might pay profitable attention to the way implicit assumptions phrase, shape, and direct the focus of a research question. The field of the teaching of writing abounds with assumptions, often with little documentation for them. In many cases, the implicit assumption of a question promises to be at least as worthy of research as the question itself.

Persons in the field repeat their questions about the relationship of speech to writing with a wide range of assumptions. Some assume implicitly that, since writing and gesture-eye contact-speech occur in such obviously different media, there is no relationship between them; others that speech connects to writing in some way, but they are unsure of the evidence in their experience; while other writers, teachers, and students find a demonstrable, productive connection between the media of speech and writing.

This concern in the field is in part due to the years of Story Workshop experience, to the documentation in Story Workshop anthologies and literature, and to the increased attention given to the method at professional conferences and in teacher-training programs and the literature of the field. In order for this question to embody Story Workshop theory, it should be rephrased: rather than the relationship of speech to writing, we should study the relationship of *physical voice* to writing, the extension of physical voice into another medium that employs symbols in print to enable another person to recognize, "hear," and receive the voice and its communication.

An important point for examination here is the relationship of the ability to "hear" your voice in writing to the development of your ability to write. To "hear" your voice in writing requires an "Inter-

nalized Listener." Story Workshop directors focus effort on the discovery of voice and upon arousing and developing the capacity to "hear" it, to feel it, and to "listen to it and for it." This may describe an internalized "you" relationship, an immediate sense of a clear, receptive, responsive, discriminating audience in yourself. Story Workshop experience continually documents the importance of this relationship in the process of composing, of learning to write. It offers a major direction for research. Anecdotal interview histories of experiences in hearing one's voice in writing could be most helpful.

The development of the Internalized Listener relates directly to the heightening of effective expression, seeing, movement, and organization in writing. Well-known authors have had an imperfect sense of the Internalized Listener. Most of us also have an imperfect Internalized Listener, and we need an outside listener and an outside sense of responsive audience. Rather simple interview research could be conducted into comparing what various persons in the field of the teaching of writing mean by "sense of audience" and by other similar terms. The term *persona* also overlaps the term *voice*. In Story Workshop theory, voice in part contains the function of persona.

A study could be made of the effects of various immediate audiences operating according to different sets of rules. The immediate Story Workshop audience could be tested, in many different situations on different age levels, and compared to immediate audiences where negative critical response is permitted. Other audience rules might be tested. Always the researchers should look finally to the quantity and quality of writing produced.

A study could also be made of the relationship between the development of the Internalized Listener's sense of the immediate external audience and the sense of a not-physically-present, reading audience which must be internalized. In a Story Workshop case history writing class, a psychiatrist needed to have a face before him in order to write, so he hired his son to sit by him.

How does the capacity to hear one's voice in writing and to listen to it and to discriminate in its workings manifest itself in children? When and where? What kinds of educational approaches and experiences (in and out of schools) help it? What kinds hinder or prevent it? Is there a point of no return, an approximate age after which the development of this capacity may hardly be accomplished at all or only haphazardly? Story Workshop experience suggests that people retain the capacity to a certain extent until late in life. Are there other early life experiences essential to the underlying potential to "see" imagery and to "hear" one's voice which, if not accomplished

early, bring about a point of no return or of diminishing returns? Does the range, variety, and intensity of fantasy play-life, alone and with others, influence the capacity for perception and voice in telling and writing? How do television and books differ in their influence on the seeing in fantasy play-life?

Do children who crawl and explore freely and communicate freely with adults manifest a more responsive capacity of the Internalized Listener? More responsive than whom or what? Do children who regularly climb trees, who explore and heighten their sense of balance and the challenge of motor response, see imagery with more depth and vividness and hear and use their voices with more facility than children who do not? Do they learn to read more readily?

These questions of attitudes about physical life, though they appear to require correlation studies which have not been productive in other fields, do challenge important stereotyped sociocultural assumptions about writing and reading. For instance, do suppression and sublimation of sexual impulse provide more impulse and energy for writing? Or do they actually diminish the capacities of voice and perception, the impulse to write? The lives of many writers, such as Tolstoi, Ibsen, Dostoevski, Yeats, Faulkner, Kafka, Goethe, suggest that marriages and love affairs catalyzed important creative periods. How does our "high" culture's apparent exclusion of gestural and other bodily nuance of verbal expression affect attitudes about reading and writing and consequently affect teacher-student relationships and the ability of students to learn to read and write? For an innovative researcher, such questions may be intriguing. For instance, a researcher might explore the relationship between precise, vivid gestural ability and the ability to perceive and abstract relationships, sequences, patterns. Gestures, for example, appear to be frequently used to communicate the abstractions of physics and of technical diagrams.

You can hardly study "seeing" and "voice" in writing unless you include writing replete with "seeing." How does one research the inculcation and incorporation of attitudes toward writing in various primary, secondary, and undergraduate school experiences?

A study could be conducted on the effects upon writing skills of the apparent drastic decrease in oral reading by teachers and students in primary and secondary schools. One could study classes in primary and secondary schools where, for one group, a writing and "readback" period is set aside each day of thirty to forty-five minutes, while control groups go without such periods. In the first group, the writing period and its results would be clearly separate from other

verbal skills teaching that may be taking place during the day. One could also set up control groups testing basic forms of address against more abstracted senses of address. Several writing experiments could be conducted with such groups: testing sense of immediate audience, of form and imagery, and of what, when read aloud, communicates effectively to the class. Experiments could be conducted with the introduction of the following forms of writing into late primary and secondary education: journals, diaries, letters, storytelling, parodies of story and of poetic forms with repeated salient patterns (folktales, biblical tales, the dozens, jump-rope rhymes, nursery rhymes, odes, and so on). These forms appear to release, aid, and abet the capacity to hear, sense, feel, listen to one's voice (and the shared cultural voice).

When one seeks to pass from the state of inactivity (when one is supposed to be approaching the act of writing) to the active state of writing, even a very experienced writer often feels a dragging avoidance up to the time of the engagement, release, and movement of perceptions and voice. Then the resistance turns into welcome. Then, with the writer putting one word after another, comes the sense of being carried along. For a few writers, it continues to be a painful process. It exhilarates others. Does the hearing of your voice or the voice of others cause your seeing and sense of movement? Or does the seeing cause the hearing of your voice? Or do both occur? Is it the word that bodies forth the vision or the vision that summons the word and sense of movement? Do we see to solve or solve to see? Much effort appears to be spent in many writing classes on trying to solve problems before seeing, telling, and writing about them. Story Workshop experience and that of many writers of imaginative and expository pieces suggest that we both see to solve and solve to see and move from the specific to the general and the general to the specific separately and concurrently and that distortion of ability develops if both capacities are not actively cultivated. We see imaginatively in order to communicate, and we communicate in order to stimulate the imaginations of others.

Many primary and secondary school teachers (and undergraduate teachers too) using the Story Workshop method in their classes report that their young male students emerge strongly in writing for the first time and show leadership in writing activities. Comparative studies could be arranged on the hypothesis that certain methods of teaching exclude certain attitudes in order to maintain an assumed or desired form of social order, while other methods may be able to include persons with those attitudes. An associated hypothesis might

be that the teacher's method governs and enables students at least as much as the personality of the teacher. Another study might be done of the ways that the personality of the teacher enhances the results of a teaching method.

The first "breakthrough" for most students occurs in oral telling in the class. What obstacle is removed to cause this breakthrough, enabling the communication of vivid imagery to the audience of the Story Workshop semicircle? The next breakthrough usually occurs in reading to the class, where reader and class hear the reader's voice joined with the voice of the story. Next a breakthrough occurs in the in-class writing; next, in journal writing done outside the class; then in the writings done outside the class which may be read and received by the audience in the class. What resistances or obstacles are removed, set aside, or overcome for each step of this process? Is it one obstacle or avoidance-defense being progressively broken down and removed? Are the resistances and obstacles permanently removed, or do they return? Are they overcome in some situations and then "welcomed" back in others? Does the removal of the resistances to the active, integrated state of seeing and telling, of perceiving and writing, carry over into the life of the student? I'm suggesting that much in our society works to create "avoidance defenses" and encourages avoidance of activity and concentration.

The pressure or urgency of seeing something vividly, "of having something to say," appears to be particularly catalytic for learning process. Story Workshop directors point their effort toward such discovery. The "basic skills difficulties" of many students no longer constitute such a formidable barrier to communication when this vivid seeing, this desire to communicate, wells up strongly. If the teaching of writing reaches the students' sources of seeing and voice, are "basic skills" learning processes more readily engaged?

It appears that students write more and improve more in their writing when the teacher actively writes on his or her own with good quality of finished result and that students write and explore verbal media more willingly and with more result when the teacher is an active good writer. In many cases, the students do not know that the teacher is an active writer, but the above comparative results are obtained anyway. I have seen instances where teachers who for years thought themselves to be good teachers, skilled in appreciation and encouragement but not in their personal writing, began actively writing and noticed remarkable changes in the quality and quantity of their students' writings, usually with more serious effort all around in their classes. I have seen other cases where the teacher was

an active writer, relinquished it, and the writing results diminished among his or her students. Often such a teacher refuses to see the diminished presence and quality of voice and seeing in the students' writings.

The questions here are: How are things actually imparted from teacher to student, from writing master to apprentice? Why does a student learn more from a teacher who is an active good writer when the teacher-writer may know less than other teachers about associated areas of knowledge—about the terms of abstract grammar, for instance? Do students learn more about the use of "correct" standard grammar in their writing from a teacher who is an active good writer?

That teachers get what they ask for, whether they want it or not, is an important point of research. An appropriate question is: How can teachers ask for and get what they want without giving inhibiting, excluding, confusing double messages?

Research into the use and effect of prohibitions and permissions which teachers suggest to students could produce interesting results. For instance, one may secure a focus of concentration by requiring students in a class to write in the present tense or in the third person or in the first person. These are instructions that secure concentration by excluding seemingly "difficult" choices. What are the long-term, lasting effects? We could test exclusive instructions against inclusive ones. Does an instruction such as, "Don't use many adjectives!" actually divide a student's attention, diminish positive concentration by directing part of his or her attention and energy to trying to satisfy the instructor's wish? Where does the student draw the line on how many adjectives? If the teacher does not soon lift, reexplain, or recondition the exclusive instruction, what happens to the student's writing? What happens when a teacher says, "Don't write long sentences!"? Does such a prohibition have more lasting impact upon younger people? Teachers frequently react with, "But that's not what I meant at all!" to a student's understanding of an instruction. Different phrasings of instructions could be tested. We could test "should," "don't," and simple imperative instructions. How do you provide for the widest net of learning and discovering possibilities, at the same time securing a focus of concentration, without using "don'ts" which may exclude important opportunities? We might research the lasting effect of any instructions.

This line of questioning brings us to the subject of positive and negative teacher-reflection in student writings, a matter worthy of research. A few years ago while reading manuscripts for a student

anthology, I realized that I could separate the pieces of writing into groups according to certain likenesses of, for instance, voice, perception, content, and attitude. Each grouping belonged to a particular teacher, and most of the "reflected" characteristics were like those with which I was familiar in the teachers' writings. The really good and effective pieces of writing, however, appeared to be largely free of teacher-reflection. In another instance, the students of a particular teacher wrote only short movements, which reflected the length of the teacher's own writings. When the teacher became a more active writer, the students began writing pieces of variable length. In another case, students spent their effort on childhood material with a certain attitude toward it similar to the "flat" side of the teacher's writing. In other cases, students reflected the "flat" side of the teacher's voice.

Wherever a teacher seeks to find his or her avoidance defenses reinforced, students usually, and obviously, reflect these negative or "flat" sides of the teacher's voice, perceptions, and values. In some cases, a teacher may stamp overt approval on sentimental writing and disapproval on writing with realistic or imaginative insights and movements. Whole classes shift content, values, and attitudes in their writing to gain the teacher's approval. You can compare classes where teachers' ability to discriminate clear from almost clear expression shows in the students' writing against classes where teachers' lack of this ability produces an "I'm O.K., you're O.K." approval between them and their students. Some persons immediately assert that teacher reflection of any kind is bad. Yet, millions of students labor every day to give teachers what they think teachers want.

Students reflect in positive ways a good teacher's sense for exploration, experimentation, discovery, standards, and opportunities of effective expression. Here the effect of the total presence of the teacher as a writer, in a context that enhances rather than suppresses positive, catalytic signals and recognitions, becomes crucially apparent. (This should not be construed to mean that every fine writer is a good teacher. It suggests that the teacher who is an active writer gets much better results than teachers who are not. The writer must be a teacher, and the teacher must be trained.)

Other questions invite attention. For example, if you grow to adulthood instructed and believing that writing is wholly different from and unconnected to your physical voice, what effect does that have upon the direction and realization of your capacities for writing? Upon the access to and presence of "seeing" and image and

voice in your writing? Do students' writings on all levels reflect and incorporate the values and attitudes of teachers, adults, and educational systems? Does the reflection of certain values and approved technical elements flatten the student's voice and deprive his or her writing of clarity? What comparisons are possible for writing done by students within a school context and writing done concurrently outside it? (I have examples of children's writings done outside of school, in "required" activity.) Does a certain bafflement about what the teacher wants, when the teacher evidently wants a great deal, aid students in relying upon their resources for seeing, solving, and discovering really effective expression?

What can be distinguished in the reading environment, from childhood to adulthood, that draws forth and heightens a person's awareness of the principles of expressed image and movement, seeing and voice? Is learning to read easier when seeing and voice in the materials compel the attention of the reader? A comparative study might be undertaken of the influences of clearly seen "classical" adventure, suspense, fantasy, and folktale stories with strong individual voices upon children's ability to see and express imagery and movement in writing, as against the influences of house-written and edited children's literature offered as texts in many primary and secondary classes and read in many homes.

Specific Story Workshop Research Points

I prefer that the claims I've made for the Story Workshop method of teaching writing be tested and studied within the context of the whole of the Story Workshop method and process, with classes conducted by fully certified Story Workshop directors. I've observed that, though teachers may productively use Story Workshop techniques and principles to inform their teaching, learning results with students are directly proportionate to the kind, quality, range, and amount of the teacher's Story Workshop training and writing ability.

Frequently, teachers without formal Story Workshop training have three or four exciting sessions and then do not know where to go or do not grasp the implications and/or need of ongoing movement. However, many teachers of writing do find their work usefully influenced by Story Workshop theory and principles. We are speaking of a complex, structured, flexible approach, both immediate and far-reaching in its workings. A particular aspect of the method can be circumscribed accurately for study only in reference to the whole Story Workshop process, of which the aspect is dynamically a part.

With experienced guidance, formal Story Workshop training allows

teachers to move from level to level, developing their capacities for writing and teaching writing. This training can be accomplished in two to two and a half years, requires no more time and energy than many graduate training programs, and could actually be incorporated into such programs.

We have observed over many years and in many different situations certain definite changes in Story Workshop participants and their writing. These observations suggest several studies that would be particularly useful to the teaching of writing:

A carefully designed study of in-depth anecdotal histories (i.e., interview material) of the process of perceiving and writing individual stories, particularly of excellent stories and other pieces written by students in Story Workshop and other writing classes and contexts.

A study of the writing progress of individual students over a period of time in Story Workshop classes with examples (and histories) of their prior writing along with a study of the writing progress of students in other kinds of writing classes.

A study of the effects of Story Workshop and other writing classes upon the dreams of participants and upon the stimulation of their memories and the relationship of these effects to writing progress.

A study of communication through oral-gestural-eye contact language and image and story among preliterate peoples and the parallels to Story Workshop and any other writing activity and communication in classrooms.

A study of linguistic change occasioned by the Story Workshop method, of ability to make "dialect" choices.

A study of group psychology as experienced in Story Workshop situations with normal well-defined Story Workshop writing goals.

A study of the pieces of literature which have been most successfully and widely used by different teachers in different situations to elicit writing and illustrate writing principles in Story Workshop and in other writing classes.

A study of the Story Workshop method as a means of reaching academically ill-prepared students.

A study of the reflection of writing "problems" in oral reading. The experience of the Story Workshop "peer" tutorial program

at Columbia College suggests a dynamic, positive relationship between increase of oral reading awareness and of writing ability and vice versa.

A study of teacher-director coachings of in-class writing periods in Story Workshop contexts and in other writing class contexts.

A study of the Story Workshop approach as a way of maximizing individual and group possibilities for "peak" catalytic experiences with lasting impact for students.

A study of the Story Workshop approach (and of other writing classes) for finding unity in diversity through the acceptance of voice.

A study of the effects of teachers upon the rewriting of stories, with sequential drafts and other material as part of the documentation.

A study of the changes in teacher behavior occasioned by Story Workshop training programs.

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